

BUSINESS WEEK

WEEK
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It can happen here

If workmen in machine shops had worked harder and longer *in time*, there would have been enough planes and guns to beat off the Nazi raiders who bombed this pitiable little child.

Do you think those men who insisted on "their rights" above their country's safety are feeling very proud of inevitable results like this today? . . . Would you?

There are 3600 workmen at Warner & Swasey working 24 hours a day in three shifts to turn out the turret lathes America needs for defense. Will you workmen, who will use these turret lathes, make the planes and guns and shells America needs so desperately—*in time*?

**WARNER
&
SWASEY**
Turret Lathes
Cleveland

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WASHINGTON BULLETIN

WHAT THE WASHINGTON NEWS MEANS TO MANAGEMENT

Price Freeze Is Set

If the Administration's decision at midweek sticks—as previous ones failed to—that much-rumored price freeze is now all set. Barring another last-minute change in detail or date of the kind that canceled an order for Apr. 15 application, here's what will happen:

The President will issue a proclamation by May 1 freezing the retail, wholesale, and manufacturing prices of all goods as of a date sometime in March. Later, if retailers get caught in too tough an inventory squeeze, wholesale and manufacturers' prices will be readjusted to earlier dates, perhaps as far back as last October.

Reason for Delay

The drastic price order will be issued without legislation or dickerings. Profit- and wage-control moves will come a little later but are part of the same program. The Office of Price Administration arrived at the over-all price-freeze policy on its own, and intended to put it into effect this week but was told by the White House to lay off until the move could be coordinated with a general anti-inflation scheme involving new tax legislation and semi-voluntary wage stabilization.

A presidential proclamation is expected to give the scheme a more spectacular sendoff than would an order over Henderson's signature.

Freezing of Outlets Too

Along with the freezing of prices comes another almost equally fundamental change in business life—virtual freezing of the retail distribution system. Business will be under what amounts to a licensing system, and newcomers won't be able to get in without government consent. It's still a puzzle just how to handle this—how, for instance, to choose among the candidates for new grocery licenses in a community whose population is expanding.

The NRA-like jockeying for position sure to arise in connection with such problems will show up, too, in the business liaison committees to be set up as part of the enforcement machinery. But Henderson knew the ins and outs of NRA, will be alert for shenanigans aimed to help favored groups.

What Won't Be Covered

Farm prices, which by law must be left free to rise to 110% of parity (or

higher, in certain instances), open a big gap in the general freeze. But it's expected to be a bothersome rather than a fatal problem. The freeze will stop the spiral of rising farm prices chasing an ever-rising parity. Farm commodities already purchased and processed can be held to levels based on original costs. And OPA expects the rise toward parity to be gradual rather than precipitous.

Services also will be largely exempt, because of the almost insuperable job of defining and standardizing them. No one knows what will be the status of restaurant prices, advertising rates, payment for recreation. Rent is a service, but under the law it can be frozen.

Then Come Wages

Issuance of the price freeze will be followed by a final effort at a solution of the wage problem which is at least nominally voluntary. If this fails, Roosevelt will get tough—either issuing an executive order on wages or, more likely, asking for legislation.

But despite consistent failure so far to get A.F.L. and C.I.O. agreement on a policy of no more increases except for the lowest wages, there's hope of success now. The mere fact that prices are frozen sets a ceiling on labor demands; they can ask for all the profit but no more. Pegging the cost of living removes the strongest argument for wage increases and offers a face-saving excuse for labor leaders to switch positions.

But most importantly, price freezing will be evidence that the President means business on inflation control. He can tell his "labor cabinet" of union leaders that he has cracked down on every other sector of the economy, that now labor must come through—or else.

And Finally, Taxes

Roosevelt's stand on prices and wages will probably be reinforced by a request to Congress for excess profits taxes stiffer than the current Treasury proposals. F.D.R. is being urged by some of his advisers to go down the line for 100% tax on excess profits.

Excess-profits taxes are primarily a political "equality-of-sacrifice" issue. But there is fundamental economic necessity behind the coming Administration proposal of a tax program that will bring in substantially more money than previous Treasury suggestions. Leon Henderson has said that no machinery he can devise will hold prices in line unless more of the excess consumer income is sopped up. Details of the

White House proposals are still being worked out. They will unquestionably include a compulsory savings feature in some form. And every increase in the tax rates reinforces the necessity of the withholding tax collection device.

• **Raising the Ante**—On taxes, the Administration is one thing but Congress is another. And preliminary feelers on stratosphere taxation have met a cool reception on the Hill. At the very least, however, F. D. R.'s upping of the asking price will result in a final tax bill much closer to the Treasury's original \$7,600,000,000 than looked likely a few weeks ago.

Labor from Latin America

There are 150,000,000 people in this hemisphere living below the Rio Grande and there is a plan in the works looking toward bringing some of them into United States industry as needed to replace our draft-depleted man power. Caution and delicacy in handling the project are necessary lest the importation raise more problems than it will solve.

Nelson Rockefeller's Office of Inter-American Affairs is hoping to dispose of some of the preliminary hazards at a meeting tentatively set for Havana in June to which all labor organizations in the American republics (including the A.F.L. and C.I.O.) will be invited to send representatives.

The plan already has the blessings of the State Department, which wants to see an inter-American labor federation established as a counter to Axis activities south of the border. State Department aides will be in Havana for the meeting to advise on how labor migration can be handled without getting snarled up in the red tape of quotas, visas, permits, etc. Letting the unions carry the ball on the plan will provide sponsors who otherwise might be bitter opponents.

• **Ticklish Problems**—Questions of how long the Latin American workers will stay, how their transportation and living arrangements will be handled, how they might be trained for other than unskilled labor jobs, how some of them may be used on farms, and a myriad of other such knotty matters still have to be settled.

To Ban Slacker Slur

Lt. Gen. William Knudsen returned to Washington recently with a glowing report on war production but with a pessimistic view of the general labor situation. He is particularly worried because badly needed skilled workers are

"TO PROVIDE FOR THE COMMON DEFENSE, TO PROMOTE THE GENERAL WELFARE"



Bad medicine for big bombers

ONE WAY to spoil a bomber's aim is to hang a curtain of steel over your ship and dare him to come down through it. To get that curtain of steel up there requires quick-firing, flexible guns.

To the plant of the Westinghouse Electric Elevator Company the Navy, a few months ago, brought its plans for such a gun. And to Westinghouse was given the important job of building the mounts that would control the aiming of these batteries of quick-firing guns.

And the Navy said, "Well done!"

Today, over the Westinghouse plant, there floats the Navy's "E" pennant—for excellence—eloquent testimony to the manner in which this Westinghouse plant performed the job. How was this plant able to get into growing production of these mounts so quickly? The answer lies in a Westinghouse characteristic called "know how"—the ability to

get things done in the best possible way.

This Westinghouse "know how" makes itself felt wherever Westinghouse craftsmen build things. Whether for the common defense or the general welfare, this "know how" is doing a job. The same skill and ingenuity that made so many splendid things for peacetime living are now being applied to many important war weapons.

"Know how" will work for you again

We look forward to the day when we can give your home, your farm, or your factory the full benefit of Westinghouse "know how" again. To speed that day means just one thing to us: to produce, in ever-increasing quantities, the tools with which to get the victory job done.

Westinghouse

For the Common Defense

Military Radio Equipment	Navy Ship Turbines and Gears
Plastic Plane Parts	Blackout Plant Lighting Equipment
Seadrome Lighting Equipment	

For the General Welfare

Air Conditioning	Switchboards	Steam Turbines
Electric Refrigerators	Lamps	Elevators

These lists mention only some of the many thousands of Westinghouse products.

WESTINGHOUSE ELECTRIC & MANUFACTURING CO., PITTSBURGH, PENNSYLVANIA
Copyr. 1942, Westinghouse Electric & Manufacturing Co.

leaving plants to join the armed forces. The reason, he says, is that they are being called slackers.

To combat this situation, Knudsen proposes that the worker be given some sort of an official card that he can carry around in his pocket certifying that he is doing war work.

Knudsen has discussed his proposition with Selective Service Chief Lewis B. Hershey and Donald M. Nelson. Apparently something will be done.

Women's Draft Postponed

Registration of women probably will be put off for a while. After the President's recent statement that registration was being considered, General Hershey and Secretary of Labor Perkins, among others, met to discuss the situation. They agreed unanimously to urge Roosevelt to defer the registration.

It was explained that there is a surplus of women workers now, that no registration should be taken until the labor market gets tighter, as any registration now would be out-of-date by then.

Blast on Hiring Policies

Since last July, a standard clause written into all government contracts has forbidden discrimination against any worker on account of race, creed, color, or national origin. By executive order a Committee on Fair Employment Practice was set up to police conformity with this proviso and to recommend any measures which it deems "necessary or proper to effectuate" the policy of non-discrimination.

Technically, fines could be levied as penalties for violation of the provision or contracts could even be revoked on the committee's recommendation, but inevitably the most effective weapon of enforcement will be the one which the committee wielded for the first time this week—publicity. And public protest or counter-publicity is virtually the only weapon which blacklisted companies can wield in their own defense.

The committee made its first blast a big one by singling out ten large war contractors and citing them for allegedly anti-Negro and anti-Jewish hiring practices. The companies, mostly in the Chicago-Milwaukee area, were Stewart-Warner, General Motors' Buick Division, Bearse Mfg., Simpson Mfg., Studebaker, Nordberg Mfg., A. O. Smith, Allis-Chalmers, Harnischfeger, and the Heil Co.

Jones's Perquisites

When Banker Jesse Jones woke up last Tuesday morning he couldn't find

his subsidiaries. His worst fears were realized when he discovered that Vice-President Wallace had them. Heavy criticism of Jones for failure to push his stockpile program covering imported critical raw materials on a scale commensurate with the war effort had culminated in a Presidential order placing these importing operations in Wallace's Board of Economic Warfare subject to over-all direction by Production Chief Nelson.

For this purpose, either Wallace or Milo Perkins, the executive director of BEW, can set up new corporations or direct the operations of RFC and its corporate satellites. Jones will continue to handle domestic materials.

• **Where BEW Fits**—Wallace and the BEW also will handle receipt of materials taken in trade for lend-lease shipments. Ending the row over negotiating the master agreements with lend-lease countries, the President left BEW subordinate to the State Department.

Outsiders Come Up

It's too soon to say that the once mighty Jesse now is only a figurehead but his vast powers are rapidly dwindling. Rumors persist that the financing of war plants will be taken entirely out of his hands by WPB.

Army, Navy and Maritime Commission also are taking business away from RFC under their new power to make or guarantee loans to war contractors and subcontractors (page 77). All federal housing loans, previously under J. J.'s wing in the Federal Loan Agency, recently were transferred to the newly created National Housing Agency.

Butyl for Butadiene

Oil companies hope that it will be their good fortune to rescue civilians from tire famine. They got their heads together this week on plans to make 300,000 tons of butyl on New Jersey

Union Security—by Referendum Only

The National War Labor Board's International Harvester Co. decision inevitably sets a pattern for handling union security disputes during the war. The board itself tried to minimize the precedent-making angle, but indications are that it will be applied to other important cases, including Little Steel. This doesn't mean, though, that every union's request for a security clause will be granted forthwith.

The Harvester formula, on which the board split 8 to 4 (with the public and labor members comprising the majority), provides that the company shall grant a union maintenance-of-membership clause only if a majority of the union members in good standing vote, in a referendum, in favor of requiring continued union membership as a condition of employment.

Interesting aspect of the referendum is that it will be conducted under the auspices of the labor board—a requirement which union men, in peacetime, would vigorously oppose as "an unjustifiable governmental encroachment upon internal union affairs."

The Harvester ruling is a refinement of the Marshall Field "formula" under which each employee individually had to notify the company of his acceptance of the maintenance provision or it did not affect him. Both stem from a board theory

of "voluntarism" as opposed to the old-style compulsory maintenance-of-membership clause awarded by the NWLB in Walker-Turner (page 74) and by the National Defense Mediation Board at Federal Shipbuilding.

The NWLB delayed its vote on the Harvester case for days, hoping that the union security issue could be settled by a unanimous vote of the employer, labor, and public members. This probably would have ended any probability of congressional action to "freeze" open or union shops for the duration—a course of action urged by Admiral Land and Secretary Knox in congressional testimony this week. The employer members dissented, however, and the result may be more agitation in Congress for legislative determination of a national labor policy.

Important feature of the Harvester case was that A.F.L. and C.I.O. unions, which engaged in bitter rivalry in the plants last year, joined in presenting their stand to NWLB. The board thought its maintenance clause would remove much of the source of friction between A.F.L. and C.I.O., and leaders of the two groups said they would urge A.F.L. members to join the C.I.O. in the six plants where C.I.O. is predominant, and C.I.O. members to join A.F.L. in two plants where the Federation has exclusive rights.



Willson designed Respirators provide a maximum supply of fresh air. This ease of breathing increases the efficiency of workmen without sacrificing protection.



There is a Willson designed Respirator and Goggle for every conceivable industrial hazard. Consult your local Willson Safety Service Representative or write direct.

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READING, PA. U.S.A.

WASHINGTON BULLETIN (Continued)

Standard's assurance that the know-how is available to them on a royalty-free basis. With the exception of a contract with Standard to make butyl, Jesse Jones's 700,000 ton synthetic rubber program is confined to buna rubber, and under that program tire companies make the rubber from butadiene supplied by oil and chemical companies.

On the butyl project, oil companies got plenty of encouragement this week from Vice-President Wallace, Senator Truman, and other critics of the handling of the synthetic program by Jesse Jones and WPB. There's a fair chance that Congress will see to it that the oil companies get financial backing.

• **Why It's Possible**—Curtailement of gasoline use in the East and Northwest, the oil companies claim, will enable them to use present equipment in making the butyl.

Secondhand Pipe to the Rescue

The East Coast gas and oil situation (page 36) brightened somewhat this week with Ickes' announcement that 1,400 miles of secondhand pipeline will be dug from the East Texas fields and relocated at points from which "all the minimum essential requirements of the Atlantic seaboard" can be supplied. By piecing together existing facilities and augmenting routes from the Southwest to Illinois or to Mississippi, using sections of the transferred pipeline, a liberal contribution can be made to the flow of oil products to the East.

Gas Rationing Approaches

Watch for the issuance of gasoline ration cards, probably within the next six weeks, in those areas already operating under government restrictions (despite Harold Ickes' contention that the step may be unnecessary). The big 24-in. Texas-to-New Jersey pipeline project also is being revived and—despite Maritime Commission and other government opposition—the practicability of hauling fuel oil in 35,000-bbl. lots in the radically designed "Sea Otter" cargo ships is very hot.

Clarifying Price Policies

Two recent decisions emphasize important trends in OPA's fixing of retail prices. Fixed prices are exclusive of state sales taxes and federal excise taxes—this was made clear by amendment to Price Regulation 111 on new vacuum cleaners—and the freezing of prices at their highest level as of a given date means that price differentials between individual retailers prevailing on that date must be preserved; the retailer who featured

cut prices on the freezing date is now stuck with them.

Specifically, in commenting on the order fixing prices of radios, phonographs, washing machines, and stoves OPA has made it clear that the manufacturer's suggested resale prices on individual models are not to be quoted unless top prices were up to those levels on Mar. 19 when prices were frozen.

Artful Dodging

WPB's all-outers point to the order limiting production of electrical appliances as an example of the crafty way in which industry-minded officials can go easy on industries being converted to war work. As issued Mar. 30, Order L-65 limited the use appliance manufacturers might make of nickel, chromium, tin, alloy steel, copper, and aluminum. But it didn't limit them as drastically as would the conservation orders governing each of these particular materials. Buried in the order was a clause saying the manufacturers had to obey conservation orders—but only conservation orders governing "other materials."

• **Nailed**—A hot fight ensued when other WPB officials realized what the order implied. A week later an amendment was issued making all relevant orders applicable.

Capital Gains (and Losses)

You can believe semiofficial statements that U.S. airplane production alone now equals total Axis output—will within a week or two. British and Russian output together amount to rather more than as much again.

Trustbuster Thurman Arnold is in high dudgeon because Under Secretary of War Patterson and Under Secretary of the Navy Forrestal went over his head to obtain postponement of the trial of an antitrust case against General Electric and other light-bulb makers. The rub is that Westinghouse Electric has just accepted a consent decree contingent upon court action enjoining General Electric from monopolistic practices alleged by the government.

Conversion from brass to steel cartridge cases will be speeded by the discovery that the same punch machinery can be used simply by increasing the pressure about 15%. This will relieve the acute drain on copper supplies much sooner than expected.

Prices of used automobiles will be frozen in a few days. Ceilings will be considerably higher than prevailing values.

—Business Week
Washington Bureau

FIGURES OF THE WEEK

THE INDEX (see chart below). *179.7 †180.0 175.9 160.6 144.6

PRODUCTION

Steel Ingot Operations (% of capacity).....	97.2	98.6	97.9	98.4	98.3
Automobile Production.....	22,996	22,320	30,630	79,065	99,260
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)....	\$28,299	\$33,512	\$35,608	\$17,294	\$16,698
Electric Power Output (million kilowatt-hours).....	3,321	3,349	3,357	3,355	2,906
Crude Oil (daily average, 1,000 bbls.).....	3,543	3,418	3,515	4,071	3,604
Bituminous Coal (daily average, 1,000 tons).....	2,019	1,858	1,693	1,854	665

TRADE

Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars).....	86	86	84	93	85
All Other Carloadings (daily average, 1,000 cars).....	52	48	44	60	31
Check Payments (outside N. Y. City, millions).....	\$5,455	\$6,713	\$5,547	\$5,548	\$4,794
Money in Circulation (Wednesday series, millions).....	\$11,610	\$11,593	\$11,520	\$10,237	\$8,993
Department Store Sales (change from same week of preceding year).....	+22%	+25%	+28%	+35%	+17%
Business Failures (Dun & Bradstreet, number).....	215	243	224	210	240

PRICES (Average for the week)

Spot Commodity Index (Moody's, Dec. 31, 1931 = 100).....	233.3	233.0	229.8	210.7	186.9
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)....	154.2	154.9	154.1	145.6	134.6
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)....	185.3	185.1	181.7	157.5	135.9
Finished Steel Composite (Steel, ton).....	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton).....	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.).....	12.000¢	12.000¢	12.000¢	12.000¢	12.033¢
Wheat (No. 2, hard winter, Kansas City, bu.).....	\$1.16	\$1.18	\$1.22	\$1.13	\$0.88
Sugar (raw, delivered New York, lb.).....	3.74¢	3.74¢	3.74¢	3.50¢	3.38¢
Cotton (middling, ten designated markets, lb.).....	20.30¢	20.38¢	19.35¢	16.66¢	11.14¢
Wool Tops (New York, lb.).....	\$1.302	\$1.319	\$1.294	\$1.303	\$1.260
Rubber (ribbed smoked sheets, New York, lb.).....	22.50¢	22.50¢	22.50¢	22.50¢	23.07¢

FINANCE

90 Stocks, Price Index (Standard & Poor's Corp.).....	62.9	64.6	64.4	77.9	76.4
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's).....	4.26%	4.25%	4.32%	4.28%	4.35%
U. S. Bond Yield (average of all taxable issues due or callable after twelve years) ..	**2.32%	2.33%	2.36%	2.13%	#
U. S. Treasury 3-to-5 year Note Yield (taxable).....	**0.97%	0.95%	0.94%	0.69%	0.86%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average).....	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6-months, N. Y. City (prevailing rate).....	1/8%	1/8%	1/8%	1/8%	1-1/8%

BANKING (Millions of dollars)

Demand Deposits Adjusted, reporting member banks.....	24,799	24,197	25,129	24,400	23,430
Total Loans and Investments, reporting member banks.....	30,883	30,494	31,034	29,132	27,138
Commercial and Agricultural Loans, reporting member banks.....	6,975	7,003	6,959	6,501	5,494
Securities Loans, reporting member banks.....	849	815	865	920	952
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks....	15,776	15,389	15,935	14,307	13,477
Other Securities Held, reporting member banks.....	3,726	3,711	3,688	3,749	3,815
Excess Reserves, all member banks (Wednesday series).....	3,170	3,000	3,270	5,209	6,027
Total Federal Reserve Credit Outstanding (Wednesday series).....	2,384	2,339	2,347	2,265	2,235

*Preliminary, week ended April 11th.

** New series.

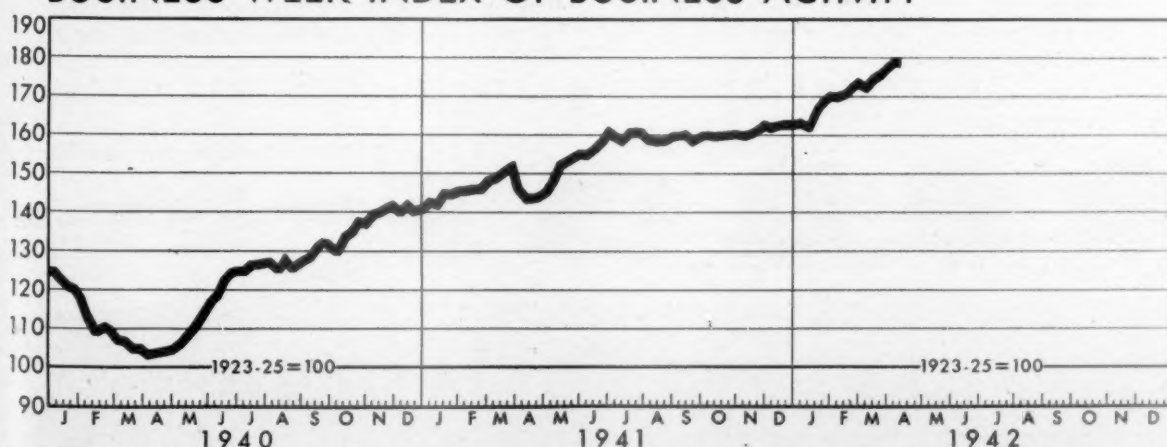
† Revised.

Not available.

‡ Date for "Latest Week" on each series on request.

§ Ceiling fixed by government.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY



VITAL POWER POINT.
Tri-Clad 3-hp motor operating
pusher mechanism on a
forging furnace.

Are You
Safeguarding
VITAL POWER POINTS?



Use **TRI-CLAD** Motors

on Equipment That Must Give Continuous Service

One motor, if it's on a vital machine, may be essential to the production of an entire shop department. Such a motor must have *extra* protection. It must be secure against (1) physical damage, (2) electrical break down, (3) operating wear and tear.

General Electric's Tri-Clad motor has protection in abundance. Its frame is of cast iron; its windings are "armored" against oil and moisture; its

bearings are of a new, improved design. All this means greater operating surety at *vital* power points.

Today, with all motor operation so important, why not take advantage of the *extra* protection features of Tri-Clad motors? They are now available up to 100 hp in standard, open construction. Ask your G-E representative about other types and sizes. *General Electric, Schenectady, N. Y.*

BUILT FOR PROTECTION FIRST... TO LAST



General Electric and its employees are proud of the Navy award of Excellence made to its Erie Works for the manufacture of naval ordnance.

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THE OUTLOOK

War Strain Begins to Tell

Arms needs tax nation's capacity; even Army must now use substitute materials and strategy may be affected. Price plan another step in freezing the economy.

Restoration of Axis-minded Pierre Laval to the "throne" of conquered France; Japanese naval penetration of the Bay of Bengal and further advances in Burma; and continued sinking of shipping along the Atlantic seaboard this week served to re-emphasize the magnitude of the task ahead for the United States and its allies (page 38). Unless one or both of the major Axis participants cracks, a several-years war is inevitable. And as military matters stand today, business men would do well to brace themselves for that contingency along with the increasingly rigorous controls from Washington that it implies.

Hitler's Spring Push

For although Hitler's timetable apparently has been deranged by the surprisingly-sustained Russian winter attack, there is still no reason to assume that the German army has not a mighty spring push left in its system. As for Japan, its lengthening successes are proof that its strength is not exhausted, particularly since conquests have added and are adding to its military resources.

The strain of war already is beginning to tell in the United States—proof that no nation, no matter how great its initial industrial prowess, can take a major military effort in stride. This week, for example, steel operations dropped 1.4 points to 97.2% of capacity. In terms of production, the loss is not grave—even though every ingot counts. More pertinent is the cause of the drop: furnaces had to be shut down for repairs and relining. As time goes on, stoppages for rehabilitation will increase—not only in steel, but in other lines. Industry cannot carry on around-the-clock production, with minimum time-out for repairs, without intermittent machine failure.

Straining Capacity

The strain tells in another way. The nation already has used up most of its accumulated fat. Months back it was still possible to increase the supply of critical materials (steel, copper, nickel, rubber, etc.) for war production merely by curtailing use in such civilian goods as automobiles, tires, refrigerators, etc. But today, direct war production is absorbing practically all of the nation's

capacity to produce or obtain critical commodities. In steel, 85% or more of current shipments are on A-3 priority orders or higher. Hardly any steel—and that largely rejections—is available for less than A-rated demand. The same is true, only more so, of copper, aluminum, rubber, and so on.

Ersatz for the Army

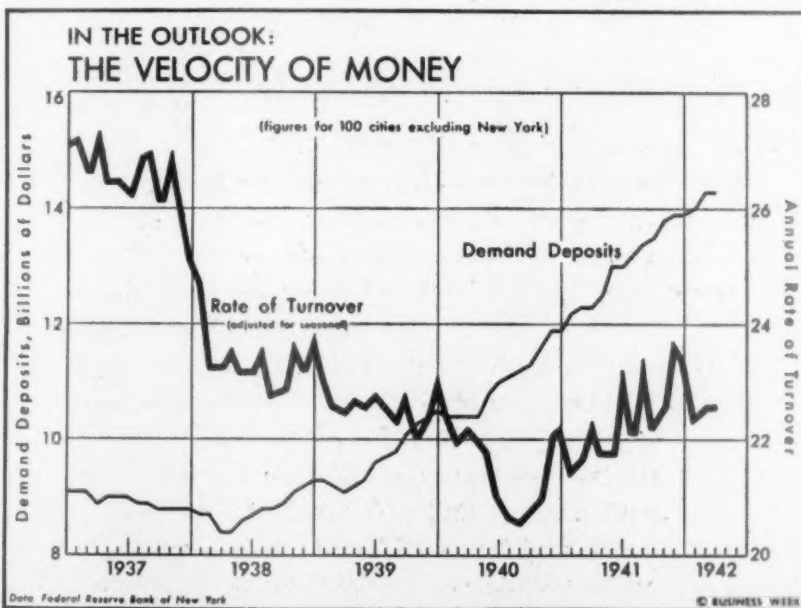
Indeed, military shortages are rapidly developing. It used to be that only civilian goods companies had to seek substitutes for critical materials, but now "ersatz" is being used in armaments. Airplane companies are substituting steel, plywood, and sometimes plastics to cut down on aluminum and

magnesium. We're producing steel shell casings to conserve brass. And the Army Quartermaster Corps, recognizing the overall stringency, has ordered its purchasing agents to eliminate the use of critical materials wherever possible (BW-Apr. 4 '42, p62).

But the problem does not stop with substitute materials. It may ultimately be necessary for the military to choose between one type of equipment and another. Already, the shortage of steel plates for ships has forced the War Production Board to curtail freight car output (page 17). Later on, we may have to limit new plant building to conserve steel; or the military strategists may have to decide between merchant ships and naval vessels; or between ships and tanks.

Materials Bottleneck

This epitomizes a crucial change in the war effort. Originally, we had particular bottlenecks, such as machine tools, or aluminum, or a special type of plant as for smokeless powder or



When people talk about inflation (and who doesn't, these days?) they usually think in terms of prices: Is the cost of living going up? But there is another measure, equally significant—especially to economists: How fast are people turning over their bank deposits? Is the use of money on the increase? For that measures whether corporations and individuals are converting their bank balances into goods. And the heavy line above suggests

that such conversion has been accelerating since the middle of 1940—after the fall of France. From a rate of 27 times a year in 1937, deposit turnover dropped to 21 times in 1940 and now is back to 23 times. This rise does not seem large, quantitatively—it's a gain of only 10%. But deposits are at a record high and any increase in velocity takes on a heightened inflationary accent—because there's more money turning over at a faster rate.

anti-aircraft guns. And one by one they could be corrected fairly rapidly. However, it is much more difficult and timetaking to expand the nation's output of overall basic materials. And this—the output of such materials—has now become the overall bottleneck which not only controls our rate of war production, but also the United Nations' military strategy. After all, if even ultimately you can't have both tanks and naval vessels in unlimited quantity your plan of attack necessarily changes.

The President's program to extend price ceilings all along the line (page 5) is a good example of how the war gradually intensifies government control of the economy. From a selective system of price fixing we are now approaching the Baruch plan. Similarly, production controls—what business men can and cannot make—are steadily increasing (BW—Mar. 28 '42, p. 13). And the longer the war lasts, the closer to all-out regimentation we will come. That's the trend. And the business man who wants to be in business at the end of this "struggle for survival" will not close his eyes to it.

Business Sidelight

The opening of the baseball season provided a war as well as a business sidelight. At the New York Giants-Brooklyn Dodgers game, a spectator caught a foul ball, but refused to throw it back to the playing field. The stands booed and boomed. Why? Because returned baseballs are to be forwarded to Army and Navy camps. Thus a time-honored custom passes. Not to be able to keep a foul ball—certainly this is no longer "America as usual."

Those Sugar Cards

OPA finally issues blanks for rationing all industrial users, right down to retailers. Strict rules placed on inventories.

The Office of Price Administration started the last mile down the road to sugar rationing this week by releasing registration forms to be filled out by every food wholesaler, retailer, manufacturer, and everyone else who uses sugar, except the housewife. All will register on Apr. 28 and 29 at the nearest high school or junior high school building, whichever is designated by the local rationing board.

Housewives will register during the following week on forms to be released later.

• May Be Filled in Advance—Three forms are now available through OPA field offices or local rationing board. Two must be filled out by all industrial users of sugar, big and small, and the third must be filled out by all wholesalers and retailers. The forms can be filled out ahead of time, but must be signed by a duly authorized agent of the company in the presence of a rationing board registrar on either one of the two days.

As soon as the forms are checked, OPA hopes to give each registrant a certificate covering the amount of sugar he is entitled to buy so that trade in this commodity will be interrupted as little as possible. No sugar will be sold at retail, however, during the first week of

May when housewives are registering for their ration cards.

• Method of Replacement—The whole idea of the wholesale-retail registration is to provide each outlet with a certificate covering an original allotment of sugar sufficiently large to handle most of its normal customers. After the original allotment is used up, wholesalers and retailers will be able to get supplies of sugar only by presenting local boards with stamps or certificates covering sales that had been made from the starting stocks.

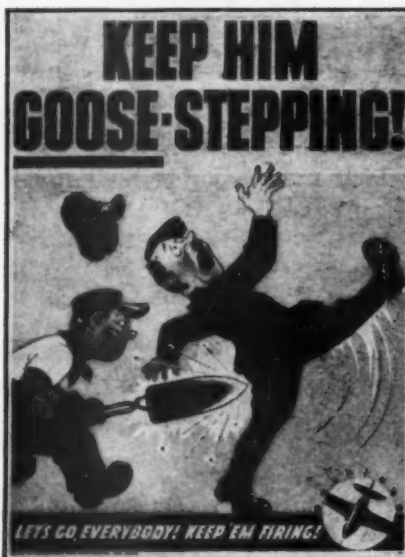
The retailer's original certificate will show an "allowable inventory" based on the lower of the following two figures: (1) one pound for each dollar of gross food sales made for the week ending Apr. 25, 1942, or (2) one-fourth of the sugar delivered to the retailer during November, 1941.

• Regulating Inventory—Present inventories will be subtracted from the "allowable inventory" to provide the amount of sugar the retailer can add to his stock. If present inventory is higher than "allowable inventory," the retailer must register, then must sell off some sugar and come back with stamps or certificates to prove that his inventory is below the allowable figure before he can buy more.

Wholesalers' "allowable inventory" will be computed as follows: the amount of sugar which the wholesaler received during all of 1941 will be divided by twice the number of months in which he received shipments. Added to this figure will be one unit of his normal commercial sugar shipment. For example, if a wholesaler bought sugar in carload lots around Dec. 1, 1941, then he would be accorded one carload in addition to the result of the above division.

• One Big Omission—From the industrial point of view, the registration forms leave out the most important piece of information—how sugar will be given to each segment of the food industry. This is the result of the running controversy between the sugar section of WPB's food supply branch and OPA's rationing organization. Officials of the former believe that there is enough sugar to give each segment of the food industry the same percentage quota of what it used in 1941, while the OPA men favor a system of classifying each segment according to its importance, with a separate quota for each classification. This controversy won't be settled until shortly before the registration dates.

OPA will announce regulations limiting the amount of sugar that can be used per unit of each product. For example, if a canner used one ton of sugar last year to pack 1,000 cases of peaches, he may be obliged to pack the same amount this year on three-fourths of a ton.



AXIS TO GRIND

There's a war to win, and if production will win it, then American management and labor are out to get the



production. That's the keynote of the War Production Drive (page 68), and it's well exemplified in these posters which now are on display at the Oldsmobile division of General Motors.

Subcontracts for All

Radio set makers, on more or less compulsory basis, pass war work down from large to small manufacturers. Companies devise "family" groupings along geographical lines.

What with all the to-do over spreading subcontracts and keeping little manufacturers alive, the War Production Board is now taking a stab at the problem by using a more or less mandatory system. It's frankly an experiment, on trial so far in only one instance—the radio set industry, which was also the field for testing industry-wide metal allotments in place of "B" priorities (BW—Aug. 24, p. 24).

• **Geographic Grouping**—Here's how the plan is supposed to work. Each maker of the now-banned civilian sets who hasn't a prime government contract is assigned to a specific prime contractor, and becomes a member of his "family group." The major determinant of the membership in such groups is geographic, although previous customer-seller relationships (if any) may also be used.

Three WPB branches—ordnance, radio, and contract distribution—currently cooperate in setting up the marriages. Later, as the experiment takes better shape, this tripartite arrangement will give way to a single deputy procurement office assigned to the Signal Corps.

• **Groups "A," "B," and "C"**—As a guinea pig, the radio set industry is viewed as an especially docile and intelligent specimen. On top of the heap are five "A" firms, immensely big in war contracts, capital, and research resources. These include Westinghouse, RCA, General Electric, Western Electric, and Bendix (which is not a set-maker, but an important supplier of subassemblies).

Next to this quintet is a "B" group. It is distinguished from the "A" group in that it makes more consumer—and less capital—goods. Included here are Zenith, Philco, Emerson, Colonial, Farnsworth, etc. Finally comes a third—or "C"—group composed of the many smaller set-makers whose civilian product is normally limited either in distribution or variety or both.

• **\$14 Billion in Orders**—Spread through the "A" and "B" groups are millions of dollars of defense contracts. The radio industry's cumulative total is \$1,250,000,000, though some of that goes to "C" also. But because the "C" share is shoveled out thin, and because some "C" manufacturers have nothing at all, these companies need the assistance of the two larger groups to keep alive—and the government wants their production.

This is where the "family" arrangement comes in. The "A" and "B" cate-

gories have been perfectly willing in most instances to give "C" whatever parts work they can't handle, and "A" has additionally been willing to farm out a lot of copy work. Because copy work involves mere reproduction of blueprints, "A" can be generous to the extent that such work only clutters research departments.

• **Beneath the "C" Group**—The benefits of this scheme meantime actually go one step further than WPB intended. Beneath the "C" group are literally hundreds of parts makers. WPB didn't consider them at all, because it was only trying to save the set makers whose civilian production had been cut off (BW—Mar. 14, '42, p. 20).

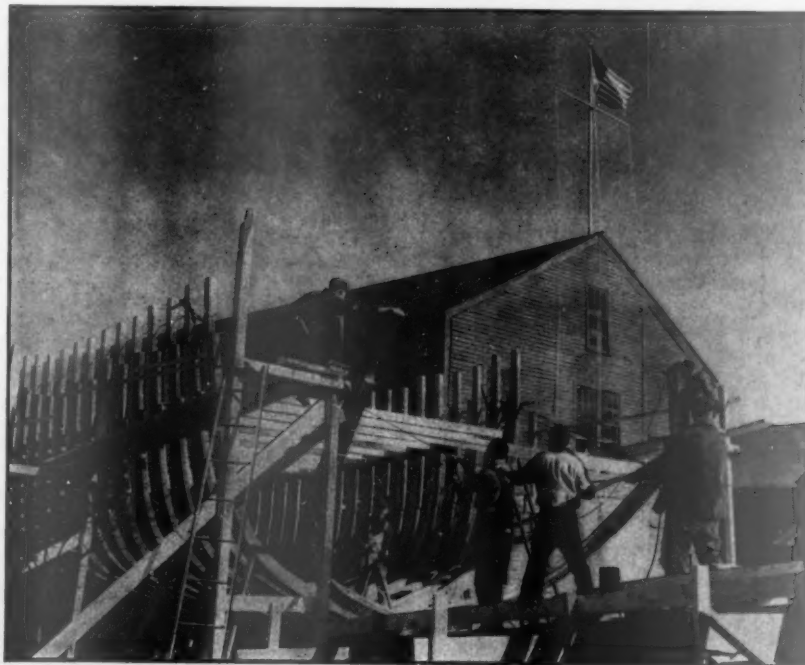
Yet the prime contractors are informally considering these virtual parts-making outcasts as essential sub-suppliers, and are treating them with due consideration.

• **Requirements for Success**—All told, WPB has thus far reported itself well

pleased with the experiment. It's perhaps too early to tell whether it will be applied in other industries, but the radio set people candidly see two angles essential to success: (1) The war contracts must be big enough to permit subcontracting rather than a fight over the allotted money, and (2) the industry must be closely knit by means of a strong trade association (like the Radio Manufacturers Assn.) which will arbitrate disputes and act as Washington liaison. Intramural fights—and sour acceptance of decisions—would ruin everything.

Even so, not everybody can be saved. Some of the parts makers are sure to fold, particularly if they specialize in nothing but headphones, loudspeakers, or certain types of condensers.

• **Temporary Expedients**—Meantime two other expedients are being used to ease the pangs of conversion from civilian to war production. WPB is allowing those set makers who normally employ a lot of woodworkers extra time to get out of civilian production so that the woodworkers will get sufficient training in metal work. And Radio Manufacturers Assn. is undertaking an inventory of metals, etc., so that manufacturers who are pinched by priorities may get informal relief (via trading) before the government comes to the rescue.



WOODEN SHIPS FOR WAR

Wooden ships and the skilled down-East shipbuilders whose fathers and grandfathers have followed the trade have not been forgotten by the Navy. The Navy's "E" for excellence pennant—the same award that is coveted by the largest shipbuilding concerns

in the nation—now flies over the century-old shipyard of Hogdon Brothers, Goudy & Stevens, at East Boothbay (Me.), which has consistently kept ahead of schedule in making wooden minesweepers. Not to be confused with wooden cargo ships of the first World War, these minesweepers are trim, sturdy, and easily maneuvered.

Redealing Tools

Stamp plan for allocation of the machines among services and war industries is scheduled to go into effect at early date.

The machine-tool industry is getting ready for what some manufacturers are calling "the Stamp Act"—a new plan for allocation of output. Washington has proposed this plan to take the place of the priorities system which, first on a voluntary, later on a compulsory basis, has governed the distribution of machine tools since the early days of the defense program.

● **Stamp for Each Tool**—Under the new setup, which is almost certain to be applied soon, the War Production Board will issue a stamp for each machine tool ordered after a date yet to be fixed. The stamps will be divided among (1) the armed services, (2) lend-lease, and (3) domestic industrial operations which bear indirectly on the war, such as manufacture of air compressors or synthetic rubber.

The services, which obviously will get the vast majority of the machines, will know in advance what their allocations will be for definite periods, perhaps three or six months, or longer. Each service can then divide its machines among its contractors as it sees fit. Army Air Corps and Navy Bureau of Aeronautics will be allotted so much (rumored to be one-third for the two branches combined), Army Ordnance so much, the Navy and Maritime Commission so much.

● **Asking and Receiving**—Pool orders will not take the place of individual orders. Each war contractor still will have the privilege of asking for whatever machine tools he needs, subject to the approval of the branch of the service with which he is doing business. He can continue to specify his choice of size, type, and make of machine tool. He will find out whether he is to get what he wants or something else when he receives a stamp from the service branch indicating the make of machine which he will be assigned. Whatever the outcome, he will have to take this machine and like it.

The stamp will contain the size, type and make of machine. Unless present plans are changed, it also will bear a preference number indicating priority of shipment to be observed by the machine-tool builder.

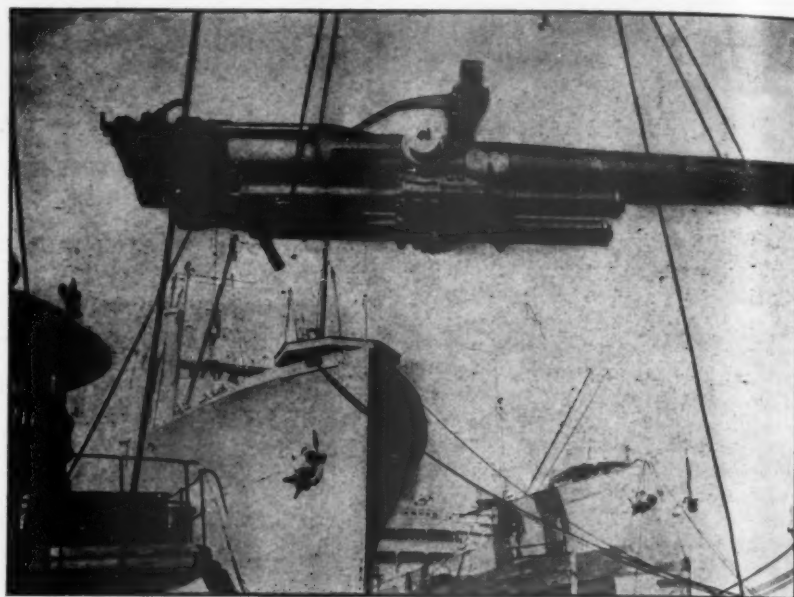
● **Why the New Scheme?**—It is thought that the plan will spread orders over the industry more effectively and quicken deliveries to vital defense plants. In the past, the contractor's ability to specify what he wanted without too much interference has resulted

in a piling up of orders to an unprecedented height at favored plants and much smaller backlogs proportionately at others. In a situation in which there is more than enough machine tool business to keep all companies operating at top speed all year, Washington hopes to raise the backlogs of less-favored companies.

Another reason for the change is the desire of Washington (including the Army and Navy Munitions Board, which has had much to do with pro-

moting the stamp plan) to control more closely the acquisition of machine tools by war contractors with top ratings. The suspicion exists that some contractors have used their preferential standing to provide themselves with more new machine tools than they require, thus preparing for postwar competition, to the present detriment of other contractors who are trying to get war production started.

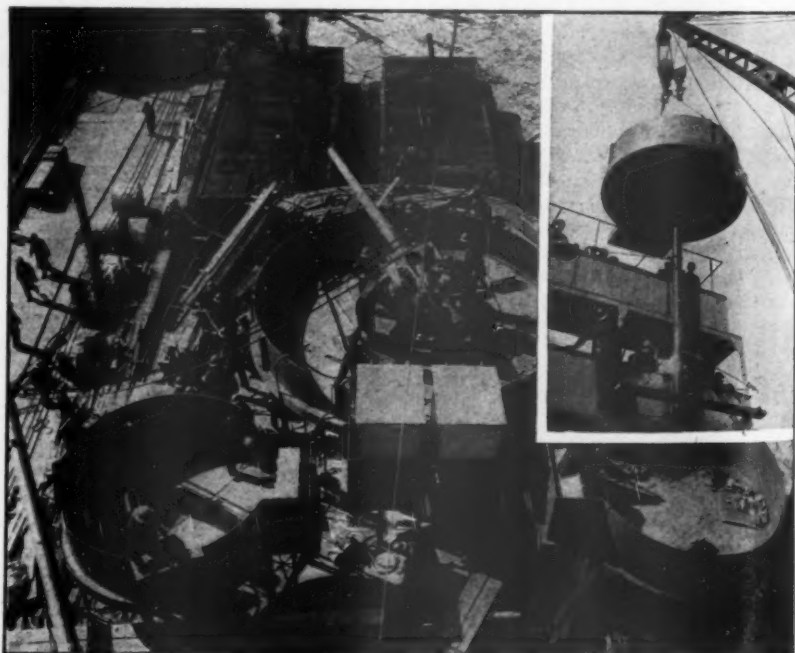
● **Service Rivalry**—Still another reason, less talked about except privately, is that



FOR SUBS—BAD NEWS

At a shipyard "somewhere in the United States" a row of merchantmen are taking on cargoes of insurance against attacks by subs and

bombing planes. In steel-protected emplacements (below) workers put the finishing touches on a heavy gun. Machine guns are to be placed in the smaller nests which have been welded to the superstructure (inset).





For every American railroad today it is a tough, uphill climb to obtain enough equipment. WPB has author-

ized construction of only 18,000 new freight cars in the last eight months of 1942; 130,000 had been recommended.

it may help to reduce the constant competition among the service branches for the highest priority rating. The jockeying on this point (each branch naturally wanting an advantage over all others) has occupied hours and days and even weeks. The stamp plan divides the existing supply of tools in advance among all branches, leaving to the individual branch whether it wishes to push production of one item ahead of another.

Machine-tool builders see merit in the proposed system, but they are fearful that the intricacies of giving preference to stamps with lower numbers than others will be just as much of a headache as the present master-preference numerical list.

• **Pool Orders**—While there is no intention of having the industry produce all machines for a common pool, pool orders are not dispensed with. Such orders have served primarily to give business to builders whose backlogs were diminishing to the point where they needed fresh orders to keep their starting departments going. In recent months, total pool orders have risen to \$600,000,000 or more.

The industry is just now recovering from an avalanche of buying which struck it in March, mainly in the final ten days. The Munitions Board, feeling that some top-rated war contractors weren't placing machine tools as fast as they should, sent out a notice that the contractor would lose his priority rating if machine-tool orders for their requirements were not in the hands of machine-tool builders before Apr. 1. The result was the greatest wave of machine-tool purchasing in history.

• **Overordering**—Many of these orders will have to be changed or shaken down

in size as actual requirements are figured out more accurately. One thing is sure—contractors stayed on the safe side and overordered. In one case a leading company booked 4,000 individual machines in 48 hours (equal to six months' capacity production). In another, \$12,000,000 of business flowed into a builder's office in a few days' time.

Washington contends this helter-skelter buying was justified and will prove beneficial. It gave the industry an indication of the amount of business ahead, just in case any machine-tool builder might have the impression that the industry had managed to get over the war hump.

• **Production Figures**—Machine-tool production in February was 20,307 units valued at \$84,355,000, compared with 19,266 units totaling \$83,546,794 during January. If presses and other metal-working machinery are included, the February volume amounted to \$93,100,000. The goal set by Washington for 1942 is \$2,000,000,000, but that seems impossible of attainment. If output reaches \$1,700,000,000 (based on machine tools, presses and other machinery), the industry will be doing amazingly well. It is probable, however, that production will hit the \$2,000,000,000-a-year rate before the end of 1942.

War officials recognize that the machine-tool industry has done an almost insuperable task, but says that still more must be done. Two long shifts (worked by some companies) as opposed to three shorter shifts are looked upon with disfavor.

Builders are beginning to take on women workers, who have been employed only rarely by the industry.

Railroads on Spot

Unless WPB relaxes limit on new freight cars and locomotives, operating problem may become worst since 1918.

Harassed railroad officials added another bitter disappointment to their collection when the War Production Board clamped a limit of 18,000 freight cars and 300 locomotives on equipment production in the last eight months of this year.

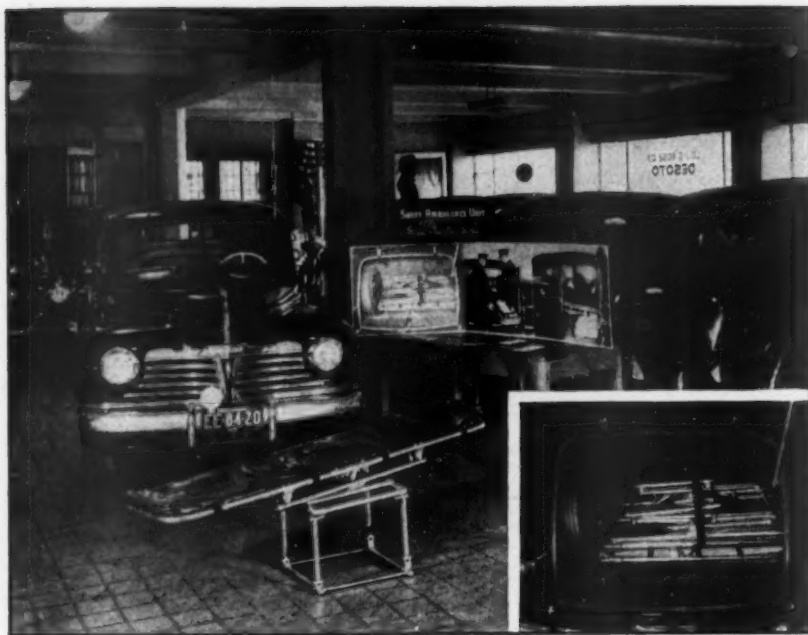
• **Expectation vs. Realization**—The roads knew that recommendations of Joseph B. Eastman, head of the Office of Defense Transportation, called for construction of 130,000 cars and 1,200 engines in the balance of the year. In spite of lagging production to date, they expected the authorities would allow large additions to equipment in time to meet 1942 traffic peaks. Instead, they now find that allocations will barely cover replacement of freight cars in the rest of the year. Under the new program, the roads will get a total of only 62,000 new cars this year, instead of the 175,000 Eastman recommended.

The new program also permits completion of the 36,000 cars and 926 locomotives originally scheduled for construction in the first four months of the year. Any encouragement the roads might find in this provision is offset by the fact that the original schedule called for delivery before the end of April, but belated allocation of materials makes it certain that the program will fall far behind its timetable.

• **Hoping for Revision**—Even now the roads find it hard to believe that expansion of equipment will be forbidden. Although Washington shows no sign of relenting, rail officials are already talking about a possible revision of the order. Moreover, Eastman, addressing the Atlantic States Shippers Advisory Board, declared that the new schedule would not provide for the demands of war transportation, and that he hoped further discussion would produce "modified conclusions."

So far the roads' equipment expansion program has moved from one discouragement to another. Almost a year ago, the railroads laid out a program for increasing freight-car ownership to keep pace with rising traffic. On Oct. 1, they were 24,000 cars behind schedule. By the end of the year, the deficit had increased to around 33,000 cars. Shortages of essential materials limited production to about half the capacity of the car shops.

• **Production Figures**—In mid-January, war production authorities set up a plan for assigning priorities for production of 45,000 cars by May. January output



CONVERTIBLE AMBULANCE

With nothing much to sell but service, automobile dealers are investigating the possibilities of franchises for civilian defense equipment. In Detroit the Louis Rose Co., Michigan

distributors for DeSoto-Plymouth, is displaying Swift First Aider Ambulance units, which convert any two-door sedan into an ambulance without altering the car. The units, made by A-B Stoves, Inc., Battle Creek, will stow away in a car trunk (inset).

was set for 9,000 cars; 36,000 more were to be finished in the next three months.

So far the roads have received about 26,600 of these cars. Actual January deliveries totaled 8,013 cars; contract shops accounted for 6,150 cars, company shops for 1,863. In February, contract builders delivered 7,321 cars; company shop output is estimated at slightly over 1,600.

Preliminary reports indicate that while March output was well ahead of February it still fell short of planned production.

• **Orders from WPB**—At the end of March, WPB issued two orders designed to step up the output of freight cars. The first instructed the Iron and Steel Branch to schedule for allocation materials needed to construct the 36,000 cars previously authorized. The second directed car builders to standardize and pool car designs.

Although these orders will ease the situation somewhat, the roads are pessimistic about their effectiveness. Even immediate allocation of materials couldn't get production back on schedule this late in the game; and standardization won't bring an appreciable stepup because for some time almost all the roads have confined orders to 13 standard types.

• **Locomotive Problem**—In locomotive construction, the picture is much the same. Washington's three-month plan

last January called for rapid completion of the 926 locomotives then on order or slated to be turned out for stock. Throughout February and March, the steam-locomotive builders reported that their floor space was taken up with half finished engines which could not be completed until the government released essential materials. Primary bottlenecks both here and in the car shops are steel plates and steel castings.

Many roads are more worried about lack of motive power than about a car shortage.

• **Diesel Production**—The one really cheerful item in recent figures is Diesel production—reported about on schedule. By drawing on inventories of vital parts, producers have been able to keep up output even though deliveries of materials lag.

The supply situation for rails and other road-maintenance equipment also has officials fidgeting. The roads have estimated that they will need at least 1,600,000 tons of rail during 1942 to keep tracks in shape under increasing traffic loads. A WPB order allowed them 538,000 tons of steel in the first quarter, most of it rail, but present estimates are that 350,000 tons would be an outside figure for actual deliveries.

• **Allocation Order**—Last month, WPB ordered the Iron and Steel Branch to schedule allocations for 1,260,000 tons of heavy rail. If this comes through

promptly, it will improve the situation greatly, but after recent experiences the roads are pessimistic about deliveries.

In an attempt to get around the steel shortage, railroads have been experimenting with wooden freight cars. So far the results have not been promising. Redesigning of box cars offers the only possibility of substantial saving in this direction (wooden floors are practically standard on flat cars, and wooden-sided gondolas are common). Difficulty is that wood can be used only above the sill; a wooden-frame car couldn't stand the pounding it would get in a train with steel frames.

• **Design to Utilize Wood**—The latest WPB order instructs builders to use wood wherever possible in new cars. Engineering committees of the Assn. of American Railroads have worked out a design for a box car built entirely of wood above the sills, and as a last resort the roads may accept this. Both in weight and strength factors, however, the steel car is so much superior that only desperation would drive builders back to wood.

If materials were made available, car manufacturers could still turn out the 130,000 cars recommended by Eastman for the rest of the year. Contract shops have an estimated capacity of 14,700 cars a month. Company shops probably could account for another 2,000.

• **Locomotive-Building**—Locomotives take about four months to build, but engineers say half-finished units now in the shops could be completed rapidly if materials came through. Both locomotive builders and contract car shops have substantial orders for war products—largely ordnance and tanks—but insist that these do not reduce railroad equipment capacity.

If WPB holds them to their present allotment, the railroads will be faced with the worst operational problems since 1918. In terms of ton miles, traffic last year was the heaviest in history. This year is expected to top 1941 by at least 10%, and the increase will undoubtedly continue in 1943.

• **Every Unit Is Needed**—With the co-operation of shippers the roads think they can top even the peak operating efficiency reached last October, but to carry a sustained increase this year and next, they will need every new car and locomotive they can get.

Although the Office of Defense Transportation has assured the roads that it will take no drastic steps as long as traffic keeps moving, rail officials live in the constant fear that a serious car or locomotive shortage would bring government operation—as in 1918. That's why WPB's attitude is so important to them. Many believe that if WPB withholds effective aid now, the roads may be forced into government operation—and perhaps this time government ownership.

Tough on Taxis

Tire problem is beginning to look serious in many cities, and operators have small hope that OPA will heed their pleas.

War restrictions have sobered the once-rollicking taxi driver. Today he turns corners at a sedate pace, cruises as little as possible and gives priority to lightweight fares. With rationing in effect, he doesn't know where his next set of tires is coming from.

• **Retreads, Maybe**—Under federal tire rationing, taxis are on List B. This means that they are not eligible for any new tires but they can get retreaded and recapped shoes by application to local rationing boards provided, of course, supplies of these are available.

Faced by this threat of bare rims, the industry went to Washington with requests for List A rating. Some arguments were: Greater use of taxis would conserve rubber on other cars; taxis average 60 passengers daily and hence should outrank private cars; they are meeting greater demands from military and industrial personnel; cabs constitute a valuable emergency war transport reserve as shown by the Paris taxis which reinforced Joffre during the first Battle of the Marne; and 2,000 long tons of crude rubber would supply the 270,000 casings and tubes needed annually by the nation's 50,000 taxis thereby keeping 200,000 drivers in jobs.

• **Stretching the Rubber**—But the operators made the pleas with small hope of moving the Office of Price Administration. Present efforts are to stretch

current supplies to the absolute limit. It is claimed that a taxi tire should do 35,000 miles—25,000 on its original rubber, 10,000 on the recap. This is considerably better than passenger car performance. To attain this, plans are afoot to reduce cruising and to service all rubber with tender care.

World Wide Advertising Corp., New York, has canvassed various cities to find out when the shortage will begin to hurt. Los Angeles operators in February said that they could keep their cabs running for six months and, with recapping, possibly a year; in Philadelphia they figured tires would last through November; in Chicago they expected to feel the pinch by midsummer; in Boston it was September to December, and in San Francisco somewhat sooner. In a few cities taxi tires will soon be gone.

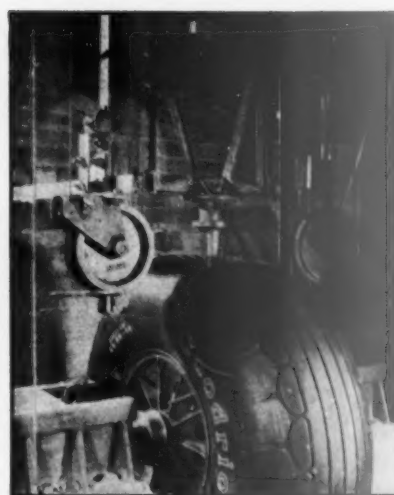
• **Buying by the Mile**—Big taxi operators in New York have bought tires by the mile, mainly from Firestone and General. The price has been around 4¢ per mile for all four tires, the tire company doing the servicing and supplying new sets when necessary. Deliveries under such contracts are among the casualties of the new OPA regulations.

Aimless cruising by drivers in search of fares comes under official and newspaper attack from both the rubber and gasoline angles. A Chicago report says that the city's 3,000 cabs have a daily cruising total of 125,000 miles, which would mean wearing out about 36 complete tires every 24 hours. This is 25%–30% of the total mileage driven.

• **Another Viewpoint**—New York cabmen protest that too much emphasis is laid on cruising. They prefer to call all nonpassenger travel "dead mileage." And they ask, "How do you know that a cab which goes by empty isn't returning from a pay trip or on its way from the garage to a hack stand?"

A New York authority figures that dead mileage must be held to 40% of the total for profitable operation and that only one quarter of this (or 10 miles out of every 100) is aimless cruising.

• **In the Capital**—Visitors to Washington shudder at the possibility of having to negotiate the capital's imperial spaces and find desired government offices without the aid of the city's 4,055 taxis. Right now Washington is especially interesting to taxi executives because of its experiment with a new "pick-up" system. In the morning rush hour, duly marked "pick-up cabs" are authorized to pick up a maximum of any four persons going in the same direction. The first one in the cab is delivered to his or her destination, the second passenger second, and so on. Charge for the first zone is 20¢ each, though official zone rates start at 30¢. Drivers report some improvement in earnings, government employees are pleased, and the Public Utilities Commission feels that the plan has justified itself.



GUILLOTINE

To determine if "boots for bombers" can take it, B. F. Goodrich tests fighter plane tires by placing them under a tire guillotine which plunges down from a height of several stories.

New-Car Dilemma

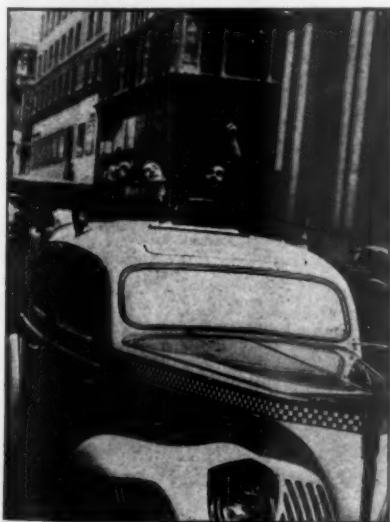
While OPA wants to make the autos last, its big worry now is getting them out of storage. Rationing may be liberalized.

Rationing of automobiles is in a muddle. The Office of Price Administration, in the ticklish position of having to push cars out with one hand while holding them back with the other, finds that its figuring has gone haywire.

• **OPA's Dual Purpose**—The pushing-out process is implicit in OPA's job of meeting recurring needs of the military establishment and of replacing police and other essential civilian cars which wear out. Further, the pushing-out is made imperative by difficulties inherent in holding the cars. The holding-back process is implicit in OPA's conservation function, its obligation to make new-car stocks last as long as possible.

New-car stocks on hand when frozen Jan. 1 were estimated at 300,000. Last-hour production in January and February added another 180,000 cars to the pool. It now develops that the early estimate was low by 30,000 to 40,000. In other words, the total, which presumably must last for the duration, was just over a half million cars at the outset of rationing.

• **What Was Planned**—The intention of OPA was to release 340,000 new cars by Mar. 2, 1943, holding back 140,000 cars as an emergency pool. Urgent factors impelling OPA to keep the cars



Visiting firemen and visiting R.C.A.F. fliers may be obliged to do their sight-seeing afoot when taxi operators' irreplaceable tires are gone.

moving include shortage of storage space, the expense of storage, and the depreciation of the cars, many of which can't be put under roof. Moreover, OPA wanted to help out the dealers, since it had to depend upon their service organizations to keep cars rolling.

The extent to which OPA's calculations have gone awry is indicated by the fact that new cars moved since the freeze total only 50,000. This includes not only sales to eligible buyers under rationing regulations but also deliveries made on proved prior sales.

• **Several "Variables"**—Rolf Nugent, OPA's auto rationer, is consoling himself that what normally would be the heavy buying season is just commencing, but he admits that several "variables" in the situation have got him down. A scare was thrown into eligible applicants for new cars by the grudging admission wrung from Leon Henderson by newsmen that it might become necessary in extremity to requisition tires. Shortage of gasoline also has frightened away eligible persons.

Although commandeering of tires from automobiles in essential uses is a bugaboo, Rationer Nugent concedes that there is some reason for apprehension regarding tire supply even to eligible automobiles.

• **Not Enough Camelback**—The buyer of a new car is sure of four tires to start with and also is eligible either for new tires or retreads when needed. But, right now at least, there's not enough camelback in prospect to back this up. OPA is trying to reconcile automobile, tire, and gas rationing programs, but they are not fully reconcilable because the inventory situations differ.

OPA officials are noncommittal concerning the possibility of broadening the automobile eligibility classification in order to stimulate car sales, but it is probable that the test of need for a new auto will be liberalized. Local rationing boards have been too strict.

• **Wide Discretion**—They were intentionally given wide discretion by the original rationing regulations in order to adapt the system to local conditions. For example:

Traveling salesmen of foods, medical supplies, machinery, and equipment for farms, factories, mines, oil wells, and lumber camps are included in the eligible classification for new cars. But it's left to the local boards to decide which salesmen get them. In the open spaces of North Dakota, the salesman may need a new car. In Rhode Island he may not.

• **Up to Local Boards**—The same thing holds for executives, engineers, technicians, and workers employed on work essential, directly or indirectly, to the prosecution of the war. They are eligible as a class to buy new cars, but some need them more than others, and the decision is left to the local boards.



OLD TIRE—OLD TREAD

A process for recapping tires, using only a few ounces of crude rubber per tire, has been devised by Elmer Ford Roberts, tire dealer of Hickory (N. C.). By means of special equipment, rubber from worn-out casings is removed in long strips which are cemented and vulcanized around the periphery of the tire carcass to be recapped.

Tireless Inventors

OPA's tire rationers fear that amateurs' zealous efforts to solve the rubber crisis will give the public some harmful ideas.

To that special American genius—the amateur inventor—the tire shortage has meant a call to the colors, and he has responded nobly. Not a day goes by but that the tire authorities in Washington get advice on how to make a tough problem simple by forgetting about rubber and placing their faith in leather, paper, wood, steel, cornstalks, hobnails, and who-knows-what.

• **An Answer for Everybody**—For their part, the tire rationers have responded with politeness. Deluged with mail—some nutty and some of very limited practicality—OPA answers all the letters, even turns some over to the Inventors' Council. But little by little OPA is getting the shudders, too.

The simple fact is that there's no really good substitute for rubber—yet. And should word of the would-be inventions start circulating, even the seri-

ous-minded might be tempted to burn up precious tires in the mistaken belief that wooden or paper casings will be available in no time at all. That, of course, is not so, and therefore the thought is an unpleasant one.

• **Among the Big Ideas**—Among the scores of suggestions and inventions received thus far, the following are notable for the mental labor that preceded their birth:

Wheels of hard paper made from a cornstalk base.

A method to inflate tires with nitrogen instead of air (on the alleged ground that the oxygen in air deteriorates rubber).

Removable retreads, made from old tires and attached to new ones like non-skid chains.

Leather coverings studded with metal, which—through a shrinking process—can be made to fit tires like a protective glove.

Rawhide shoes with hobnails, so fixed that they can be sewed over existing tires.

Wheels with steel-spring spokes and cornstalk-paper peripheries.

Wooden wheels.

Tires made by sewing or gluing two old casings together, so that the faults of the one will be covered by the virtues of the other. (One inventor claimed he could safely get 50 m.p.h. out of this conglomeration.)

Inner tubes of cork.

Plastic tires made from discarded shoe soles.

Sidewall coverings of cotton duck, with studs to protect the traction surface from wear.

And a process which works as follows: Cut the bead off an old tire; slip it over a new tire (deflated); then inflate.

• **Conservator Group**—Aside from the inventor group, there's also a conservator group which has turned its attention toward stretching the existing rubber supply as far as possible. Some of the suggested methods:

Install a device on autos to show decreasing air pressure in tires, thus preventing all complete flats.

Install "blackout" speedometers, which would be visible only at speeds up to 40 m.p.h. If the needle disappears—slow down.

Install governors on carburetors, set to cut off at 40 m.p.h.

Make wheel-alignments mandatory with the purchase of new tires.

Force the purchaser of a new tire to turn in an old casing.

Brand all tires to prevent theft.

Reclaim the tires on WPA wheelbarrows.

Reclaim 25,000,000 to 40,000,000 crêpe-soled (tennis) shoes.

• **Specialists in Rationing**—While some of the foregoing ideas are not without a modicum of merit, their practicality is often open to serious question. Then

TWO WAYS TO GET MORE OUT OF YOUR PRESENT BURROUGHS MACHINES

Today, when it is so essential to make the best and fullest use of the figuring and accounting equipment you now own, and to make that equipment last you as long as possible, Burroughs offers two extremely valuable and timely services to Burroughs owners.

Both Burroughs advisory service and Burroughs mechanical service have been time-tested throughout the years, and are nationwide.

They are available to you through your local Burroughs office, or by writing—

BURROUGHS ADDING MACHINE COMPANY
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【BUY UNITED STATES DEFENSE
SAVINGS BONDS AND STAMPS】



BURROUGHS ADVISORY SERVICE

Burroughs technical advisory service is rendered by men trained and experienced in systems and in the installation of machine equipment. Their knowledge of machines, applications and procedures is especially valuable in meeting today's changing conditions . . . suggesting operating short-cuts that save time . . . finding ways to handle related records in a single operation or to obtain vital statistics as a by-product of necessary pasting.



BURROUGHS MECHANICAL SERVICE

Burroughs experienced mechanical service is rendered by Burroughs' own salaried, factory-trained, factory-controlled men. These men inspect, lubricate and adjust Burroughs machines. They make repairs and replacements with genuine Burroughs parts. Their work is guaranteed by Burroughs. Conveniently located throughout the nation, Burroughs service is available in the shortest possible time.



MERRY-GO-ROUND

A new-type 250-ton single-action hydro press with a rotary table that handles more than 20,000 parts in eight hours, with only six men, is reported to be increasing production and cutting costs at the Burbank, Calif. plant of Lockheed Aircraft Co. After each "feeder" has placed one or more small parts on the die as it wheels past him, the rotary table is

turned one notch until eventually all dies and the parts they are to form are formed under the heavy hoof of the hydro press. Until recently, all hydro-press forming was done on two huge presses of 2,500- and 4,500-ton capacity, requiring some 20 men to handle about 12,000 parts in eight hours. The new machine costs one-third as much as the bigger press, and it turns out nearly twice as much work with less than half the man power.

there's a third group of thinkers, and their specialty is rationing. They're the most logical of the lot (for which reason OPA had the same ideas long ago). A few of their suggestions:

Cut out parallel hauls between rail and bus lines.

Form clubs so that fellow-travelers to the same destination will use only one auto, and ration accordingly.

Allow only a single tire for twin-wheeled rear wheels, unless safety is seriously impaired.

Don't issue any spare tires.

Produce—and ration—only tires of the highest quality.

• **Even Here**—But even among this comparatively straight-thinking group, the nut instinct has its inning. Witness the following suggestion: Allow cars with even-numbered license plates to drive only on even-numbered calendar days; odd-numbered license plates may have the opposite privilege.

Final OPA advice, after due inspection of the ideas, is (1) conserve rubber according to approved methods, (2) don't be optimistic about tire relief from star-gazers, (3) remember that the use of substitutes is often contrary to state laws, (4) be alert, but not nutty.

10¢ Checks Climb

Pay-as-you-go accounts, considered by many purely a depression convenience, prove popular during war boom.

Ever since the war boom got under way, bankers have kept the "pay-as-you-go" checking account under clinical observation. Now, after watching symptoms for two years, most of them agree that the depression-born special account for depositors who couldn't post minimum balances of \$200 or more not only survives a boom but thrives on it. This conclusion may make a big difference in banks' ideas of the position they hold and the services they should offer.

• **Originated in 1935**—Pay-as-you-go appeared first in 1935, when New York's National Safety Bank & Trust Co. offered to carry no-minimum-balance accounts, charging a flat fee for each check or deposit. Backers of the idea declared that it tapped a new market and furnished a nice new source of income

to replace losses on small accounts previously carried free—or turned down. Opponents insisted that the market for no-minimum accounts would evaporate as soon as returning prosperity made it possible for depositors to go back to regular accounts.

It took the war boom to prove that the demand for special checking facilities was not just a byproduct of hard times.

Today some 3,000 American banks, out of a total of about 14,000, have no-minimum accounts of one sort or another. In the last two years the rate of increase certainly has not faltered; the consensus is that it has actually picked up speed.

Old timers in the no-minimum balance field report the largest number of deposits in their experience. Other banks are installing the service for the first time. Experts now agree that the special account is not a temporary substitute for a regular deposit but a service desired by customers who are not interested in the ordinary type of checking account.

• **How They Stand**—Largest operator in the field, New York's Manufacturers Trust Co., numbers its accounts in the tens of thousands. Other leaders beside National Safety include National City, Bank of the Manhattan Co., and Chase National, the largest bank in the world.

Checkmaster, the corporation formed to sell out-of-town banks on National Safety's original pay-as-you-go plan, is still expanding after nearly seven years of steady growth. There has, for example, been vigorous growth for pay-as-you-go in defense areas that had felt no great need for no-minimum-balance services until recently.

Pay-as-you-go is based on the idea that a bank has something to sell. In this it contrasts with the old concept of banking as a cooperative venture in which the bank invests the depositor's money and compensates him by servicing his account. In the pay-as-you-go system, the bank expects the yield from investing the deposits to be negligible. It sells the service directly to the customer on a fee-per-item-handled basis.

Two major variations of pay-as-you-go are used now. Under one, the bank makes a charge (usually 5¢) for each check and deposit item. Under the other, it sells the depositor a book of checks; 20 for \$2 is a popular fee basis, and no charge is made for deposits. Adherents to the second like it because it holds bookkeeping to a minimum.

Some banks now use a system of "metered checks" which resembles the special checking account, although it is really a variation of the regular account. Depositors are allowed free checks each month in proportion to the size of the minimum balance they maintain. For additional checks the bank makes a charge.

The Disston Conservation Control Plan Provides Free Individual Instruction Cards For Your Workmen

An essential feature of Disston's nationwide Plan to help conserve time, tools and materials vital to war time production is Conservation Control Instruction Cards, like the one reproduced here.

These cards apply to 34 different types of cutting tools. Read the face of the card illustrated and you will see that it covers common faults in operation resulting in failures, their cause, and the best method of correction. On the reverse side of the card there are further expert information and recommendations which will improve workmanship, speed production and prolong useful tool life.

Here is a valuable and timely means of training employees, supplementing supervision, bettering your products and boosting output. George T. Weymouth, Chief of the Industrial Salvage Section, Bureau of Industrial Conservation says, "This effort reflects precisely what we would have every industrial plant in the country undertake. The entire program meets, therefore, with our approval."

Disston Conservation Control Cards are supplied to any plant *without charge*—whether or not you are a Disston tool user. Free posters, stickers and lapel buttons are also available. **NOW** is the time to enlist your organization in the national war on waste! Send at once for the booklet describing fully the Disston Conservation Control Plan and the free material. Write *today* to Henry Disston & Sons, Inc., 428 Tacony, Philadelphia, Pa., U.S.A.

GET THIS FREE BOOKLET—Here is complete information about the Disston Plan—reproductions of the Instruction Cards—Order Blank—descriptions of the free promotional material.



● Posters like these, size 10" x 14", for bulletin boards, are supplied free. Specify whether wood working or metal working.



CONSERVATION CONTROL CARD No. 2		
Hand Hack Saw Blades		
How to obtain greater efficiency and make blades last longer.		
FAILURE	CAUSE	CORRECTION
Pulling out at pin hole	Blade too tight.	Reduce tension. Allow just enough to hold blade straight and prevent twisting.
	Blade twisting in cut.	
Stripping tooth	Tooth spacing too coarse.	Use number of teeth recommended for material.
	Insufficient tension.	
Blades breaking	Tooth spacing too coarse.	Make adjustment.
	New blade in unfinished cut.	Use number of teeth recommended.
	Side strain on blade.	Start new cut.
	Twisting blade.	Do not bend frame sideways.
Premature wear	Pressure on back stroke.	Use firm, straight stroke.
	Insufficient pressure.	Lift slightly.
Correct use of tool ... makes work easier		
(CONTINUED ON OTHER SIDE)		





In striking contrast to the Rochester, N. Y., street which has been cleared of snow by the use of rock salt is the untreated portion of the intersection

in the foreground. Salt producers have been endeavoring to expand their market by showing how salt saves labor and machines.

Salt's War Bid

Always hard to promote, old table article may now step out as fire-bomb extinguisher, snow remover, weed killer.

Columbia University's Prof. William D. Turner recently set off an incendiary bomb before a crowd of news- and cameramen, doused it with 12 lb. of common salt, and pronounced that the bomb had been rendered harmless.

• **No Stray Oxygen**—What is more, added the professor, salt is superior to sand for dousing fire bombs because it doesn't disintegrate when subjected to high temperatures. Thus it won't liberate oxygen to feed the flame.

That a savant should think of salt in connection with air-raid precautions is no accident of the laboratory. Long before Prof. Turner's announcement to the press, the International Salt Co.'s research director, C. D. Looker, had made similar experiments before fire underwriters, and with virtually the same results. But before International jumped into a lot of plugging on the subject, it decided to urge an impartial expert to go into the matter. Now the gates are open for promotion.

• **One Thing That Abounds**—Aside from this new and unique air-raid use, salt is interesting in other ways during these days of marketing stresses and strains. For one thing, there's no shortage of it (the salt producers could, if they wanted to, virtually glut the market). For a second thing, salt is not the

easiest thing in the world to advertise even when consumers are flush. An unglamorous staple, it's anathema to advertising copywriters who work best with products that have eye appeal and lend themselves to differentiation.

Now and again the producers of table salt have tried to batter down these barriers by iodizing their product, making it into toothpaste, etc. Some of these attempts to instill brand-consciousness into the consumer and increase sales have borne fruit, while others have been greeted with indifference. By and large, the most widely used consumer promotion has been indirect—aimed at grocers through premiums, movies, store displays, and all sorts of concessions.

• **Catering to Industry**—Expansion in the consumer market being a tough nut to crack, the producers have looked for more revenue in a bigger (though sometimes less stable) field: the industrial market. This, in turn, has entailed a program of research.

Although salt is the most-used basic material in the manufacture of chemicals, the producers aren't relying on that angle alone despite the boom in chemicals and synthetics. They have, additionally, been trying to capitalize on the industrial upturn by plugging salt as a labor saving device.

• **Clearing the Highways**—Ice control and snow removal are two aces here. Rock salt, as distinguished from evaporated or table salt, is used for this purpose, often mixed with sand or cinders in the ratio of 100 lb. of salt to 1 cu. yd. of abrasive. When this mixture is sprinkled on ice or snow, it works beneath the surface to form a brine and loosen

the bond between pavement and ice. Snow plows can then remove the slush.

New York City used between 7,000 and 8,000 tons of rock salt for snow removal in 1940. In the winter of 1941-42—with the city faced with a shortage of trucks, labor, and water—salt again was liberally employed (though the total quantity ran behind last year due to much drier weather). Rochester, N. Y., a pioneer in the field, ordered 3,500 tons this year.

• **Highway Preserver**—Simultaneously, salt producers have been boosting their product as a preventive for roadbed heaving caused by frozen underground moisture. The railroads were the first to fall in line, feeding salt into springs and seepage to prevent freezing. Now state and local authorities are trying the same idea on highways. Latest version is to mix salt (about 30 tons to the mile) into the base for a highway in an effort to prevent freezing and thawing which might cause pavement to buckle.

For the future, the researchers have the railroads in mind. The latest angle is to sell them on using salt as a weed killer. Chemicals and plain human brawn are the time-honored standbys, and admittedly are cheaper than salt, dose for dose. But since chemicals and brawn are now at a premium, the salt people are getting a foot in the door, and they hope to keep the market after the war.

• **Bomb Packages**—Though use of salt in fighting fire bombs is only a wartime bonanza, all the major producers want their share of it. International is readying radio announcements together with store displays and banners. Consumers will be urged to buy one or two 25 lb. bags at a cost of 30¢ to 35¢ a bag—cheaper, say the salt people, than profiteer-priced sand, and in a much handier package. Added inducement: The salt can be used in the kitchen if bombs don't fall, and no farm-trained housewife would ever be at a loss for some use for the bagging.

The other producers are secretive as yet. Remarks from their camps to the effect that 25-lb. bags do not lend themselves to high production leads to the belief that somebody, like Morton or Worcester, is coming out with a special air-raid package. And it also seems likely that the salt in these special bags will be fortified with an absorbent chemical to make it more moisture-free.

Such a maneuver will diversify the advertising still more. International undoubtedly will claim that salt, especially treated with absorbent chemicals, will be too expensive vis-à-vis sand. The others can counter-claim a lot of ingredients. Fortified salt, by the way, probably won't be advertised for human consumption, thus won't clutter up the consumer's kitchen for years on end and ruin the postwar market.

One market whose future CAN be weighed

YOU KNOW THAT agriculture is a great *producing* industry . . . that during 1942 the people of agriculture will supply this country and the world with 79,000,000 hogs for slaughter, with 4,200,000,000 dozen eggs, and similar stupendous quantities of other foods and fabrics . . .

But have you thought of the vast amount of goods that farmers and their families will *consume* this year . . . with a total income of nearly 14 billion dollars to spend . . .

Building materials . . . clothing . . . drug store products . . . home furnishings . . . and yes, food. All in all, the people of agriculture constitute the greatest single consuming market in America!

And unlike many consumer groups today, agriculture is a stable market. Its population is not

shifting. And its program calls for increasing output—even after the war is won!

The stability of agriculture is a life-line to the manufacturer pressed on all sides by daily shifts and reshufflings in hundreds of marketing areas.

And nowhere is this stability better demonstrated than in the long and active life of Country Gentleman—the magazine that speaks for agriculture. For more than a century it has been counselor and friend to America's farming families. Its authority is recognized. Its word is respected.

If you are looking for a stable base on which to build your business in a world of change . . . isn't it a sensible precaution to discuss the great market of agriculture, and Country Gentleman, with your advertising agency, *now*?



COUNTRY GENTLEMAN

NATIONAL SPOKESMAN FOR AGRICULTURE



Cribs for Kiddies... Cradles for Guns!



Allis-Chalmers equipment cuts and processes lumber for U.S.A. homes—and Allis-Chalmers plants make "cradles" for 16-inch guns!



Allis-Chalmers equipment handles timber to build and furnish U.S. homes.

YES, we'll help furnish a nursery or equip a gun turret. In fact, our 1600 types of equipment are used in *every* industry.

For 95 years, we've been at this work.

Today, no other company makes as many kinds of capital goods as Allis-Chalmers.

The point is that this broad background makes possible our unique Cooperative Engineering Service. To companies engaged

in war production this is of unusual value.

It enables our engineers, working directly with your men, to solve your equipment problems in the light of your whole production set-up.

In that way, you know in advance that our equipment will fit in perfectly with your other units. *Let's talk it over.*

ALLIS-CHALMERS MFG. CO., MILWAUKEE, WIS.

IN ANY OF THE
FOLLOWING FIELDS

CALL



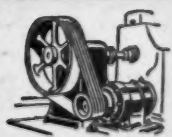
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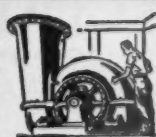
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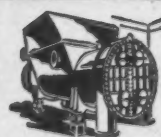
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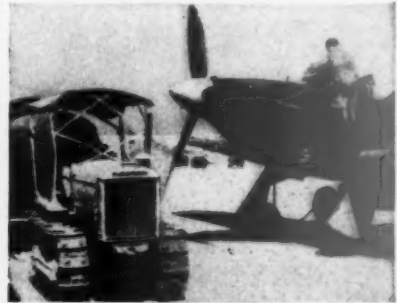


CENTRIFUGAL
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DEFENSE NEWS

Free—New 36-page, profusely illustrated brochure, "We Work For Victory . . . And We Plan for Peace." Of interest to every businessman! Shows graphically industry's enlistment in all-out victory drive. Just published by Allis-Chalmers. Write for your copy today!



Allis-Chalmers tractor rushes bombs and fuel to British warplane.

Announcing Greatest Motor Improvement in Years. New in construction, new in design, more completely protected, Allis-Chalmers introduces the new Lo-Maintenance Motor with all-round "Safety Circle" protection.

Specially designed to give "all-around" protection, the new "Safety Circle" is a wide, solid rib—integrally cast as a part of the frame—which forms an unbroken circle around the stator. One-piece cast frame and cast end brackets guard against exterior knocks.

(Write today for Bulletin No. B-6210.)

Salt for War. Salt zips food up, but the vast majority of salt produced is used for chemical and industrial purposes now essential to our war effort.

Allis-Chalmers-equipped salt mining plants are producing thousands of tons daily. Double roller mills, motors, Texrope Drives, hoisting equipment, steam turbines and electrical control equipment, all engineered and made by Allis-Chalmers, are helping maintain wartime production schedules in salt mines.

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KEE, V



Food cereals are pressed into thin with special milling equipment and built by Allis-Chalmers.



Welding blading for an Allis-Chalmers steam turbine. New Weld-O-Tron arc welds metals as light as 32 gauge.

ALLIS-CHALMERS

For Money-Saving Equipment
And Engineering Cooperation

TRUCK
PUMPS



Building Squeeze

To ease pinch created by demand and by shortage of materials, WPB clamps down on private projects.

Construction, through the days of the defense program and the early months of the war, was the one war industry without a capacity problem. As one record after another of construction volume was surpassed—\$11,000,000,000 last year for a new all-time high—the industry absorbed the work without a murmur, and there were still contractors clamoring for jobs. But war is finally catching up with the industry, and it's now in the same boat with manufacturing.

• **Caught in the Middle**—It's a pincer movement that did the job. On the one flank is an unparalleled increase in amount of necessary war construction—redoubling of the plant-building program, expansion of the Army, expansion of the Air Corps, expansion all along the line of the war effort. On the other hand, the supply of materials and construction machinery has dried up. To ease the pinch—to make the materials and machinery available on jobs where they are most sorely needed for the war effort—the War Production Board last week put the clamps on all building and put them on hard.

The flow of materials had already been largely channeled to essential projects by the application of priorities particularly on the all-important metal products, but last week's building ban makes more readily available a vast stockpile of materials, which WPB couldn't possibly have uncovered in any other way. Now owners of these materials are forced to sell them where they are needed or simply let them gather dust and storage charges for the duration. There is only one market and that's the essential one. As for construction equipment, its availability has been steadily curtailed—85% is going to Army and Navy Engineers or is shipped on lend-lease orders—and it has been difficult to control efficient war use of what is on hand by priorities. That is one of the principal reasons for last week's WPB order.

• **Setting the Limit**—Under the terms of the order, no one—except on order for one of the government's war agencies—can either start construction or purchase materials for a building project which costs more than \$500 if a private residence is involved, \$1,000 on a farm building, or \$5,000 on other enterprises, including commercial, industrial, recreational, highway and utility construction, whether privately or publicly financed. Forcing the limits to these

low levels, binding on any specific job over a period of one year, represents a distinct victory for the "all-outers" in WPB, for it was dispute over this point which held up issuance of the order during the past month (BW—Mar. 28 '42, p. 24).

Exceptions to the order—on defense housing, for example—will be made by WPB. Necessary maintenance and repair work is still permitted, and residences which are damaged or destroyed "by fire, flood, tornado, earthquake, act of God or the public enemy" may be replaced. Mining construction and construction for the petroleum industry as governed by Order M-68 may also continue.

• **No Drastic Effect**—Actually the order doesn't make as much difference as its drastic terms might imply. It's been a long time since anyone in his senses undertook large-scale construction without a priority rating, or stocks on hand of the essential plumbing, heating, and wiring equipment. The new rule is aimed primarily at small house-builders—men who heretofore have scurried around, located odd stocks of materials, and used their checkbooks as priority ratings.

Because of the restrictions which have existed on nonmilitary construction for some time and because of the steadily ballooning volume of defense building, the order isn't likely to cut total construction volume far below last year's record total. So far this year, as reported by Engineering News-Record, private building is down 53%, but federal work is up 75%, and the over-all figure of \$2,346,000,000 from Jan. 1 to date represents a net gain of 41%.

• **Who Gets Hit Hardest**—Individual elements in the industry will, of course, feel the impact of the order severely, particularly next year when the building

of war plants, military establishments, and defense housing will have passed its peak. Private home builders have already been so hard hit that they will scarcely feel the new order; many of these have already found a niche for themselves, particularly in the defense housing field, while others have simply taken to the storm cellar for the duration.

Highway construction is now the division of the industry most directly in the line of fire. The building of access roads to Army camps and war plants, together with the development of the network of highways judged strategic to defense, kept road building moving at a fairly normal rate up to last year. Now, however, the access-road program is running its course, and the War Department, no longer concerned with the theoretical possibility of invasion, has lost interest in the strategic network. Right now, its only concern is to provide roads that will keep troops and war materials out of the mud. Principal "out" for private road builders lies in the expanded airport-building program, for much of their equipment can be used in this type of construction.

• **Commandeering a Possibility**—Highway departments of state and local governments are directly on the spot—and by design, not accident, for the equipment and machinery in their hands represents virtually the only untapped reservoir of tools vital to defense. Having eyed that pool enviously for some time, WPB is just now completing a survey of its size and dimensions. Since the highway departments don't have to make their tools earn a profit, hence are not induced by the ban on building to put them into use where they are needed, WPB may be forced to requisition their idle or semi-idle equipment.

• **Other Pressures Applied**—To force the



ROAD TO JAPAN?

Working against time to complete the Alaska-U. S. Highway ahead of sched-

ule, engineers at Dawson Creek, Alaska, have not allowed subzero weather to interfere with preparations to receive new troops and supplies.



To Protect against Terror of Bomb Flare or the Costliness of Wasted Time!



ARE YOUR VITAL RECORDS REALLY SAFE FROM FIRE?

Check your vault door now. If it isn't labeled, it cannot be relied upon for dependable fire protection! Important records, plans, specifications, etc., may be virtually unprotected in an old style vault. That is why we welcome an opportunity to analyze your present fire hazard and tell you more about DIEBOLD modern vault and file storage room doors. These doors are labeled for 1/2, 1, 2, 4 and 6 hours fire resistance. Call or write us today.

METHODS EQUIPMENT • SAFES • MONEY CHESTS • ELECTRIC
REKORDESK SAFES • BANK VAULTS • OFFICE ACCESSORIES



Offices in: New York, Chicago, Detroit, Philadelphia,
Washington, Cleveland, Boston, St. Paul-Minneapolis,
Pittsburgh, St. Louis • Dealers in other Principal Cities

The shrill, terrifying whistle of a falling bomb...the skulking saboteur working in the dark...the careless flick of a smouldering cigarette...these, and any of a score of other "Acts" may cause devastating fire. But, no matter how it starts, fire is a dangerous hazard to invaluable records. Unfortunately, even insurance cannot replace such records when once destroyed.

For over 80 years Diebold has been a leader in supplying America with "preventive insurance"—fire-resistive vault doors labeled to withstand intense heat; fire-and-bandit-resistive safes and chests for office, store or home; and the famous Electric Rekordesk Safes that open and close at a touch of a button. Diebold recently has broadened its business service, and now the Cardineer Rotary File, Reveldex, Reference Panels, Visible Files, office forms and other business equipment help America do more work, at greater speed and at less cost.

While protective equipment against fire is vital, most of our energy in Diebold plants is directed toward war production—in turning out special armor plate to protect fearless American and allied airplane pilots—in producing still more armor plate for countless tanks and guns for use all over the world.

Diebold's Methods Department is ready to aid you in solving problems of record-processing or protection. To speed up work—to increase efficiency—to secure greatest protection and to add to the profit side of the ledger—consult Diebold.

DIEBOLD SAFE & LOCK CO. • Plants and General Offices: Canton, Ohio

DIEBOLD

DIEBOLD BUSINESS TOOLS PROTECT AND HOUSE AMERICA'S WEALTH AND RECORDS



TEST YOUR PLUGS, MISTER?

Before being placed in service, all welded plugs used to close off penstocks at Grand Coulee Dam had to get an O.K. from an X-ray technician.

Two General Electric 200,000-volt X-ray units were used to make radiographs, not only of welded seams of plugs but also those of the dam's 18 turbine penstocks, each of which can pass 141 tons of water a second.

most effective use possible of existing construction equipment, WPB is relying not only on its no-building order but also on other techniques. For one thing, the equipment-manufacturing industry has been subjected to deliberately tough priority treatment for some time. This treatment has not only conserved essential materials and paved the way for the conversion of the industry to the production of pumps, hoists, and engines needed in the shipbuilding program, but by cutting down on the supply of new equipment available, it has compelled both contractors and builders to make more efficient use of what they have.

Direct pressure in the form of priorities has also been applied on the builders. An order of last month forbids sale of crawler tractors except on A-1 ratings, and similar orders will issue soon on shovels and cranes. The tightening of these restrictions is forcing builders to scour the backroads for equipment, and that is just exactly what WPB wants to see happen.

• **Army Lends a Hand**—Contracts let by the Army Corps of Engineers afford another technique of bringing existing equipment into line with construction needs. The so-called re-capture clause in Engineer contracts tends steadily to syphon equipment into a government-owned pool. This is how it works. In the cost-plus-a-fee contracts on which most large construction jobs are built, use of equipment is charged to the government as a rental item. Rental for contractor-owned equipment is set according to a formula involving the cost and age of the machine.

Until last September, all equipment, whether rented from the contractor himself or from third parties, was subject to "recapture." That is, whenever the total rentals paid exceeded half the depreciated value of the equipment, the government could take it over by paying the difference. Intended at that time as financial protection for the government, this recapture provision was a sore point with contractors, who saw the tools that enabled them to stay in business being taken away from them by Washington. Last September, the schedule of rentals was lowered, and the recapture clause was omitted for contractor-owned equipment.

But regardless of contractors' feelings, equipment recapture does give the Corps control over the usage of the machinery, prevents it from being diverted to less essential work. And consideration is now being given to re-introducing recapture. One possibility is a provision that any machine acquired with priority assistance should be made subject to recapture.

• **Keeping Prices in Line**—These techniques of forcing more efficient use of construction equipment have had the inevitable effect of stimulating demand, and now to avoid runaway prices the Office of Price Administration is getting ready to freeze equipment rentals at the values laid out in the "Green Book" of the Associated Equipment Distributors. Simultaneously the Corps of Engineers is getting ready to stabilize at the same levels the rentals which it will allow in cost-plus contracts instead of permitting those rentals to be determined by competitive bidding.

Furniture's Hope

Industry, counting heavily on outfitting war workers' homes, evolves designs scaled to dimensions of new housing.

The furniture industry, which sees plenty of trouble ahead (BW—Apr. 11 '42, p. 32) is eagerly grasping one war-born opportunity: The chance to furnish the houses provided by the government for war workers. The industry expects that most of these war homes will have to be outfitted from the ground up, and their furniture needs probably cannot be met adequately out of present manufacturers' and retailers' stocks.

• **Shooting at New Market**—With its eye squarely on this opportunity, Chicago's American Furniture Mart has designated its spring showing (Apr. 27 to May 2) as the "First National Defense Furniture and Homefurnishing Market." The Mart will coordinate displays of furniture and household accessories specifically designed for war homes. "Defense" furniture likewise will be shown at the other major spring markets—Grand Rapids, High Point, and Jamestown.

Designs, while marking no radical departure, will be simpler and individual pieces will be scaled down to the dimensions of war workers' homes (13'2" x 9'6" bedrooms, for example). Importance of this potential business may be judged by the fact that such big names in the industry as Kroehler, Lenoir, Johnson-Carper, Heywood-Wakefield, and Kling have new designs in the works for the forthcoming showings.

• **Price Expectations**—Expectation is that the new designs will sell at 8% to 12% under the usual retail markups. Retailers meeting recently in New York City under the aegis of the National Retail Furniture Assn. drew up sample budgets to show that war workers' homes could be furnished completely for \$450 to \$525. These are not minimums, but the dealers figure that they represent about what the average family is able and willing to pay.

Both manufacturers and retailers recognize that prices have to be right, so that workers' kicks won't rouse Washington.

• **Other Opportunities**—In a circular letter to the trade, American Furniture Mart also points to other wartime opportunities: further supplying of furniture to the Army and Navy; production of various military items which cannot be classified as furniture, for example, propellers and other airplane parts; production of equipment for Civilian Defense.

10



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& Elevators**

Hemline of Battle

WPB moves most warily in cutting down dresses. Women's clothing industry adapts itself and hides any misgivings.

Probably no other single curtailment edict out of Washington has received as much attention from both press and public as Order L-85, which limits the amount of yardage that may henceforth go into milady's gown. The shutdown of whole industries has been brought about with a good deal less furor than the fractional shortening of hemlines and narrowing of silhouettes.

• **Handled with Care**—The War Production Board, well aware that women's fashions are unadulterated dynamite, has handled the new limitation decree with greater-than-usual care. An 18-page press release (single-spaced, on both sides of the paper) assures the ladies that no style "freezing," or standardization is involved. Contrariwise, WPB has steered clear of limitations which would dictate radical fashion changes, tend to make present wardrobes obsolete.

• **What the Order Does**—Boiled down, L-85 accomplishes this:

(1) Fixes maximum over-all lengths (from nape of neck to bottom of garment) and "sweeps" (circumference of skirt) for all women's, girls', and children's dresses, coats, skirts, jackets, etc.

WPB conducted a survey of women's clothes in 25 cities across the country as a preliminary to the limitations; L-85 is based on average, rather than minimum, measurements of garments now being worn.

(2) Forbids the sale of two or more articles of apparel at one unit price. This does not apply to suits (jackets and skirts), but it does apply to dresses sold with jackets and ensembles (dress and coat, or suit and topcoat).

(3) Forbids the manufacture of garments with such yardage-consuming style features as French (double) cuffs, double yokes; balloon, dolman, and leg-o-mutton sleeves; all-over pleating, tucking, and shirring; petticoats, overskirts, aprons, hoods, and what-not.

(4) Limits hem lengths for coats, dresses, and jackets to 2 in. Belts may not be more than 2 in. wide. Sleeves on dresses may be no more than 14 in. in circumference (for size 16). Coat and jacket sleeves must be cuffless, may not be cut on the bias.

• **Woolen Garments**—WPB is considerably stricter as regards garments made of wool. No wool at all may be used in evening gowns and wraps. Coat interlinings of either virgin or reprocessed wool are banned. Maximum measurements allowed by the order are considerably skimpier for wool dresses.

Restrictions on the manufacture of wool garments, present output of which is mostly intended for sale next fall, have already been put in force. Result has been a temporary shutdown for many



Styles in women's wear aren't being set by Paris, New York, or even Hollywood this year. It's Washington. And not by the capital's fine ladies, either, but Stanley Marcus (back to

camera), WPB's women's apparel section chief, who is telling what 1942 modes will not be while newspapers' style reporters take notes—but he insists he's not freezing styles.

coat and suit manufacturers who had expected at least a month of grace and are now forced to redesign entire lines overnight.

• **Full Impact Delayed**—For all other branches of the women's clothing industry L-85 goes into effect June 19. Thus, since women's fashions always are three or four months ahead of the seasons, its full impact probably will not be registered in store windows until late summer or early fall. Even after June 19, manufacturers and retailers will be allowed to clear out stocks on hand. The ban on multiple sales at a unit price will not be in force until Aug. 17.

Publicly, the women's clothing industry has accepted the order in the best of grace. High-fashion retailers and couturiers have gone on record as saying, in effect, that any designer who can't turn a couple of yards of flour sacking into any debutante's dream dress is not worthy of the name. Privately, many of them have grave misgivings—and they are afraid that L-85 may be only the beginning.

• **What They'd Prefer**—What many retailers and clothing manufacturers would have liked to see was conservation farther down the line. They argue that WPB could have saved 100,000,000 yd. of material (estimated annual conservation to result from the order) just as effectively, and with a good deal less trouble, by imposing a 15% cut on fabric manufacturers.

Retailers' biggest objection is to the ban on multiple sales at a single price. WPB thinks the ban will keep consumers from purchasing unnecessary jackets, coats, etc. Retailers doubt this, and say that it interferes with a time-honored merchandising practice.

• **Hardest Hit**—Manufacturers of so-called "junior" styles (technically, those to be worn by teen-age girls) probably are hardest hit as a group. In recent years, very full skirts (usually modeled after the "dirndl" dresses worn by European peasant women) have become virtually a hallmark of these styles.

Makers of inexpensive wash dresses (to retail under \$3) complain that the order makes their garments appear substandard, since their measurements usually are skimpier even than the maximums prescribed by WPB.

• **Accessories May Benefit**—Only persons likely to benefit from the order are accessory manufacturers. There's no restriction on manufacture of belts over 2 in. wide, scarves, hoods, and what-not as long as they aren't an integral part of a costume, so accessory makers figure they will have a heyday dressing up WPB's Cinderella gowns.

Exempt from the order are infants' apparel, maternity dresses, clothing for persons of abnormal size, religious robes and vestments, burial gowns, and bridal dresses.

L-85 applies to all clothing manufac-



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tured for a profit, including garments made by the two-flights-down tailor and the seamstress-by-the-day, though WPB does not pretend to any means of policing these. The housewife who makes her own or her family's clothes is not asked to comply, but Washington believes she will. Pattern manufacturers

have not been brought under the order yet, probably will be shortly.

• **A Retailer in Charge**—For one thing, the clothing industry is grateful. Administration of the order will be in the hands of Stanley Marcus, chief of the new Apparel Section in the Textile, Clothing, and Leather Goods branch of

WPB. Marcus came to Washington from the specialty store of Neiman-Marcus in Dallas, Tex.

Fashion know-alls rank Neiman-Marcus among the half-dozen smartest stores in the country, and the industry is relieved to be in the hands of a man who can tell a bustle from a hoop skirt.

WAR BUSINESS CHECKLIST

Washington's Significant Orders on Materials and Prices

• **Tires**—Tire-users eligible to obtain retreaded tires are made eligible for new tubes under amendment of the tire rationing regulations. Machinery is also set up by which retreaders may obtain allotments of camelback.

Eligible vehicles now equipped with mud or snow tires must wear them out before getting certificates for new tires.

OPA has no objection if owners of vehicles eligible for retreads change the wheels to take new "obsolete" tires.

Amendment of M-15-b prohibits manufacture of blowout shoes and restricts production of reliners.

• **Food**—Only 22 listed types of soups may be packed in tinplate after June 30, and soups so packed after that date must contain specified percentages of solids. During 1942 a canner may use, in packing these soups in condensed form, 100% of the tinplate used for the same purpose in 1941; in packing in ready-to-serve form, use is limited to 70% of 1941. Cans must be of No. 1 picnic or larger size.

Additional sugar quotas have been granted by WPB to 40 areas which have gained more than 10% in population during the past year. Instead of 80% of 1941 use, receivers in these areas will get percentages from 90% to 145%.

Interpretation 2 of the sugar order (M-55) explains that delivery of quota-exempt sugar to canners and processors applies only to requirements for first processing of foods.

• **Petroleum**—New installations of equipment to contain, distribute, or dispense liquefied petroleum gas is forbidden by order L-86. Installations under way Jan. 14 may be completed up to May 15, and replacement of containers by containers of equal or lower capacity is still permitted.

Amendment of Temporary Price Schedule 11 permits retailers in the eastern curtailment area to charge a price which will give them a 3¢ markup.

• **Tractors**—Production of small crawler tractors in the 17-35 hp. class is forbidden after Sept. 1 by Order L-53-a, and limited meanwhile to a total of 3,035 tractors, as compared with a scheduled production for the remainder of the year of 6,973.

• **Machinery**—Sale or delivery of listed types of industrial machinery (new, used,

or reconditioned) by a manufacturer or distributor is forbidden by Order L-83, except for government and lend-lease orders and orders bearing a rating of A-9 or better as evidenced by a PD-3 or PD-3A certificate countersigned before Apr. 9, or by a PD-1, PD-1A, or P-19h certificate.

The order does not prevent delivery of repair parts to fix a breakdown or any delivery of parts amounting to less than \$1,000 per machine repaired. It applies to all orders for leather, tanning, textile, cotton ginning and delinting, and shoe manufacturing and repairing machinery; also to orders over \$1,000 for pulp and papermaking machinery, and to orders over \$200 for packaging and labeling machinery (except for canning), and for paper converting, printing and publishing, bakery, confectionery, beverage bottling, and industrial sewing machinery.

• **Trucks**—Manufacture of medium and heavy trucks and off-the-road motor vehicles is forbidden after completion of February and March quotas by order L-1-e. Order P-54, granting an A-3 rating on materials for permitted trucks, is extended to May 31.

• **Typewriters**—Added to the list of persons eligible to buy standard typewriters are manufacturers of component parts of listed primary munitions and industrial equipment. To the list of portable buyers are added plants which show that 60% of their operations are in accordance with A-3 or better ratings.

• **Containers**—Manufacture of rubber closures to seal glass jars containing any of some 40 products, mostly foods, is forbidden after Apr. 19 by order M-119.

• **Sanitary Napkins**—Order L-95 limits the length of wrappers for sanitary napkins to 19 in., width of standard cellulose-filled to 8½ in., standard cotton-filled to 9 in., supersize to 9½ in.

• **Golf**—Use of cork, plastics, and metals other than iron and steel in the manufacture of golf clubs is forbidden by L-93. Use of iron and steel is cut to half the 1941 rate until June 1 and forbidden thereafter.

• **Heating Pads**—Order L-84 limits production of home-type heating pads this year to 50% of 1940 output and pro-

duction of hospital type to the full 1940 figure. Manufacturers may not purchase any critical materials except from each other, may not use any chromium or any heating element containing more than 50% nickel.

• **Shellac**—Output of phonograph records and radio transcriptions will be cut to about 30% of the 1941 figure to save shellac. Half of inventories in excess of 10,000 lb. are frozen, and uses other than disks are cut to 75% until June 30 and 35% thereafter.

• **Building**—An A-5 rating is granted for materials on the defense housing critical list which are needed for remodeling houses in defense areas. Critical materials used may not exceed \$100 per room or \$800 per structure. Dwellings must rent for not more than \$50 a month or sell for not more than \$6,000. Application is made to local FHA offices on PD-406.

All retail stocks of copper screening have been frozen by amendment of M-9-c.

• **Metals**—Prices of Lake Superior District iron ores are frozen at substantially 1941 levels by Regulation 113.

Sale, except by a retailer, of solder containing more than 16% tin by weight, or any tin-bearing babbitt or tin oxide, is forbidden by amendment of M-43 except on priority-rated orders or for manufacture or sealing of cans in accordance with Order M-81. Restrictions on use of tin are removed from manufacture of munitions.

• **Other Priority Actions**—Manufacturers of paper, paperboard, and paper products are permitted to accumulate unlimited inventories of waste paper by Order M-129. . . . Manufacture of soil pipe is limited to a single weight by amendment of Schedule IV, Order L-42.

• **Other Price Actions**—Price for used rail for structural purposes is governed by the scrap-iron schedule, No. 4, rather than relaying rail, No. 46. . . . Technical changes have been made in the following schedules: 61, leather; temporary 8, pork; 88, petroleum; 112, Pennsylvania anthracite; 32, eastern paperboard; 7, 11, 33, 35, 89, cotton goods; 102, refrigerators; 29 and 77, coke; temporary 18, electrical appliances; 80, lithopone; 111, vacuum cleaners.



DONALD DESKEY, Industrial Designer

WHY DISCUSS A SPORTSHACK WHEN WE'RE AT WAR?

WITH BUSINESS AND INDUSTRY engaged up to the hilt in winning the war for America . . . it may seem irrelevant, at first glance, for Durez to focus attention on a Sportshack.

Yet just as surely as victory will be ours . . . the Sportshack is symbol of a coming industrial upswing! But let Donald Deskey, who designed this modern log cabin, give you a clue to its importance . . .

"The Sportshack has sleeping accommodations for six. Completely insulated, it is equally suitable for beach house or ski cabin, hunting lodge or weekend house. Compact, it is pre-fabricated and demountable. Durez resin-bonded plywood makes possible such new construction features. For both exterior and interior walls are built with 'Weldtex.' This sturdy, striated plywood is as modern as today's airplane in appearance, yet has the nostalgic charm of the weathered wood in an old log cabin."

"Weldtex" is only one of the many plywoods which owe much of their development to Durez research in phenolic

resins. Naturally, along with Durez plastics, these plywoods are finding their way into war material.

But their emergency uses point unerringly to a brilliant future. Post-war production of Durez-bonded plywood pleasure boats at moderate prices is foreshadowed by the use of such plywoods right now in the navy's new mosquito boat fleets. The day will come when army barracks give way to vast economical housing projects. Sooner than you think, the aviation industry will become one of plywood's best customers. The possibilities are almost endless.

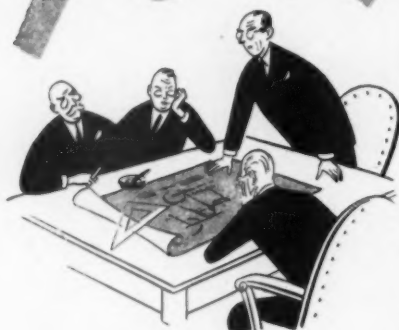
Perhaps Durez-bonded plywoods can help you serve your country today. Why not consult with Durez research engineers and chemists? Certainly you will also want to know what Durez plastics and resins can do for your business, once the victory's won. A request on your letterhead will bring *Durez Plastics News* to your desk every month . . . keep you abreast of the continuous progress in plastics — the materials of "tomorrow."

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FREE! SEND FOR INFORMATION

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Gas Deliveries Cut

Though East Coast is put under new restrictions, Ickes is still avoiding card rationing, which industry strongly favors.

Action was heavy on the East Coast gasoline-shortage front this week, with regulations, rulings, and rumors bombarding buyers and sellers.

Deliveries to service stations and bulk consumers in the restricted area were further reduced, from 80% of the base period to 66½%, effective Apr. 15.

• **Card Rationing?**—Although the petroleum industry is strongly in favor of immediate institution of card rationing of gasoline, Petroleum Coordinator Ickes expressed the belief that this method was a very cumbersome operation, difficult to work out satisfactorily, and that it should be avoided if possible. He added that he hoped that if the new cut in deliveries worked out, formal rationing would be unnecessary.

The war council of the petroleum industry announced that, on the basis of the best available estimates of tanker, tank car, and pipeline capacity, the East Coast would have a deficiency of 81,000,000 bbl. of all petroleum products (roughly 20% of normal demand) during the last nine months of this year.

• **Tank Car Peak**—The estimate is admittedly very rough, based as it is on such unpredictable factors as tanker sinkings or diversions, and possible increases in tank car and pipeline capacity. Tank car deliveries, which hit a new high of 525,000 bbl. in the week of Apr. 4, have nearly reached their peak, according to J. J. Pelley, president of the Assn. of American Railroads. There is still hope for greatly increased pipeline capacity, however.

A subcommittee of the industry's war council has proposed that 1,400 miles of pipe, which can be obtained from Middle Western and Gulf Coast facilities that are now either idle or operating between points that can be served by other means, be dug up and relocated to serve the East Coast. This week Coordinator Ickes announced that the relocation would be carried out.

• **Barges Figure in Plans**—Some of the pipe will probably be used to extend existing lines, such as the Plantation Line, and some to build new lines from oil fields to the Mississippi River, where barges can take up the load. The subcommittee also recommended that flow be reversed in certain lines which at present carry East Coast refinery products to Great Lakes consuming areas.

That the shortages of both gasoline and tires are affecting passenger car travel is now beyond doubt. A reliable source in the industry estimates that,



EYE FOR EYE

While the cat on the wall demonstrates an authentic gleam, girls in Jonas Bros. Denver studio go about their business of matching glass eyes for stuffed animals. Before the war, this country's taxidermists got their artificial animal eyes from the same German cartel that dominated the market for human glass eyes. Cut off from this source, Coleman Jonas, whose firm uses thousands of glass eyes for fish, birds, and mammals each year, began experimenting. Result: 100% U. S.-made eyes for the mounting clientele.

while passenger car use in 1941 was about 9% more than in 1940, travel in January, 1942, was no better than equal to January, 1941, and that in February it probably fell around 9% below the corresponding month last year.

• **Current Estimate**—The American Automobile Assn. estimated this week that gasoline consumption by private cars is currently running 20% below a year ago, and that use of passenger cars for long trips has been curtailed as much as 40%.

CONTACTING SERVICE MEN

One way companies can keep in touch with their employees in the armed services is facilitated by Parcels for the Forces, Inc., 45 Rockefeller Plaza, New York, N. Y. Parcels for the Forces specializes in assembling kits of food delicacies, toilet articles, and what-not for service men, already has shipped over 250,000.

The service takes complete charge of assembling, packaging, and delivery (guaranteed to any part of the world where U. S. forces may be serving). Companies may have their own labels

affixed to the packages, if they wish, and can arrange for the inclusion of house-organs, newsletters, etc. Parcels can be made up to specifications, but most companies prefer to take one of the ready-made packages. These vary in price from \$2.99 to \$8.66.

Parcels for the Forces was originated in London by the wholesale grocery firm of Johnston, Hewson. A branch was set up in the United States to enable Americans to send packages to friends and relatives in Britain. Now it's doing a full-time business supplying American soldiers and sailors.

Glum Gold Miners

Industry representatives offer to give 10 lb. of scrap for each pound of replacement parts is "last hope" gesture.

California gold mining leaders proposed to WPB recently to supply 10 lb. of scrap in the form of old machinery for every pound of new replacement parts released to them by the board. Meeting in emergency session in Sacramento, 200 representatives of the industry devised the plan as a means of postponing a shutdown of their operations.

• **Other Promises**—The group also promised to conserve present equipment and materials by a pooling arrangement among operators. For good measure, but rather superfluously, these operators who have lost 40% of their top hands to war industries, promised not to expand operations for the duration.

Apparently this "ten for one" barter plea is the last hope of California's \$50,000,000-a-year industry, hard hit by the recent WPB low priorities ruling for gold mines (BW—Mar. 14'42, p24). According to this ruling, only those gold mines whose byproduct output of copper, lead, and zinc represents at least 30% of the mine's dollar value production are in position to receive critical materials. California mines produce practically none of these byproducts.

• **What Closure Means**—The California gold interests, claiming that their problem is unlike that of other American industries, say that lack of materials causing mine shutdowns for the duration will amount to virtual confiscation of properties. Since most of the big producers in the Mother Lode are deep holes, these mines will fill with water during enforced closure. The industry contends that only 10% of these properties can be dewatered for profitable production after the war.

While the miners were still in session the dramatic news reached them that the famous old Argonaut Mine, one of the nation's greatest producers, had dumped its last bucketload of ore.



From soup to bullets

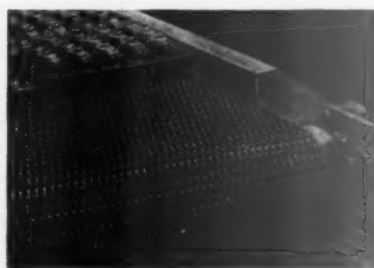
The press of a thumb... "click!"... and another clip of cartridges is ready to make aggressors wish they hadn't started!

Today's mass production of these bullets, shells and clips—and a wide variety of other war materials, even canned soup—is being facilitated by Wissco metal conveyor belts.

More and more industries, under the terrific strain of day-and-night war production, are discovering that these long-lasting metal belts not only stand up under the intense heat of annealing and hardening furnaces—or under the punishment of chemical—or wet-processing, but they also cut costs.

Wissco Conveyor Belts are but one of scores of products of the Wickwire Spencer blast furnaces and mills, now going all-out to help win the war. To

know more about Wissco products, to learn how they may help in your war effort, write Department B-3, Wickwire Spencer Steel Company, 500 Fifth Avenue, New York, N. Y.



EACH Wissco Conveyor Belt is custom-engineered, and manufactured to meet the requirements of a given, specific job—high or low temperature, chemical, abrasive or other kind of punishment. If you have a belt problem, discuss it with us.

The steel industry needs scrap. You can help Victory by salvaging and selling old metal.



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THE WAR—AND BUSINESS ABROAD

Spring Crisis Approaches

Balance of economic power, already shifted dangerously, will be at stake as Nazis and Japanese press drives for Middle East and India. Vital industries and materials threatened.

The spring crisis is developing according to pattern although slightly behind the schedule anticipated by most Washington strategists (BW—Jan. 3 '42, p30).

Convinced that the United States is in no position this spring to launch a direct attack on Japan from small, inadequately manned and supplied bases in Alaska, Tokyo has boldly moved three of its biggest and most powerful battleships and at least five of its aircraft carriers into the Indian Ocean.

Ruling Bay of Bengal

Since the beginning of April, this powerful fleet has been in virtual control of the whole vast Bay of Bengal. Bases are at Singapore, Penang (whose docks and harbor facilities were left in perfect condition when British troops were forced to flee on a few hours' notice), the Andaman Islands, and Burma. The modern airport at Mingaladon, ten miles east of Rangoon, is the largest in the entire Orient and has been in Japan's hands long enough for Nipponese repair crews to have put it in first-class condition following the damage done by retreating British forces.

The raids on Colombo and Trincomalee, on the island of Ceylon, indicate that this is probably Tokyo's next objective. If the Japanese succeed in occupying this weakly held base at the southern tip of India, the stage will be set for the great coup of this war—a juncture with the Nazis in the Middle East (BW—Mar. 14 '42, p33).

At Other End of Axis

At this point, moves at the other end of the Axis must be fitted into the picture.

Germany, after being suspiciously inactive for several months, is beginning to stir. While the Russians continue to make small gains on the northern front and opposite Moscow, German troops still hold most of the Crimea and are only a few miles from Rostov, vital gateway to the Caucasus and to Russia's greatest oil fields. At the same time, the recent shift in the Bulgarian cabinet following the visit of King Boris to Germany indicates that Bulgaria is being prepared to play a more active rôle as the puppet of Berlin.

The fact that recent British air raids over the Ruhr have been only weakly

attacked by Nazi planes supports recent rumors from the Balkans that German planes, tanks, and men are massing in Bulgaria, Greece, and the Aegean islands. It is not clear yet whether Turkey is in the line of attack or whether Hitler is preparing a vast air-borne blitz directly at Syria and (through Libya and Crete) at Egypt.

Laval's Comeback

Against this background the week's news from Vichy is especially alarming. Pierre Laval, one of the most ardently pro-Nazi of French statesmen, has been taken into the cabinet of Marshal Pétain. Since Laval approves of collaboration with Berlin and since France has little left to offer Hitler beyond the French fleet and full Vichy permission to occupy bases in the French colonies in Africa, it looks as though Germany is completing the final preparations for an all-out drive to sweep the United Nations out of the Mediterranean and

northern Africa, cut off Britain from India and China and from its oil supplies in Arabia, and Iran, and make a junction with the Japanese forces now moving east through the Bay of Bengal.

The war is approaching its most critical period, for behind the shrewd Axis strategy, which continues to be alarmingly successful, Berlin and Tokyo are gambling for control over resources and markets which will lift them completely out of the "have not" class and pave the way for a counterblockade which could prove more than Britain would be able to break.

Already there have been dangerous shifts in the balance of economic power. Six months ago the Axis controlled no more rubber than the puny output that Japan had acquired in French Indo-China. Today, if Ceylon with its annual production of 90,000 tons falls to the Nipponese, the United Nations will hold nothing but the uncertain output of Latin America and Liberia.

The Axis already controls more bauxite and tin than the United Nations, but if they can cut India off from Britain they will control the world's only great jute supply, the biggest reserves of high-grade mica, inexhaustible reserves of manganese, and important quantities of chrome, oil seeds, and cotton. The dramatic changes in the economic potential of the opposing forces after the fall of Singapore (BW—Mar. 14 '42, p40) will become genuinely alarming if the Middle East falls.

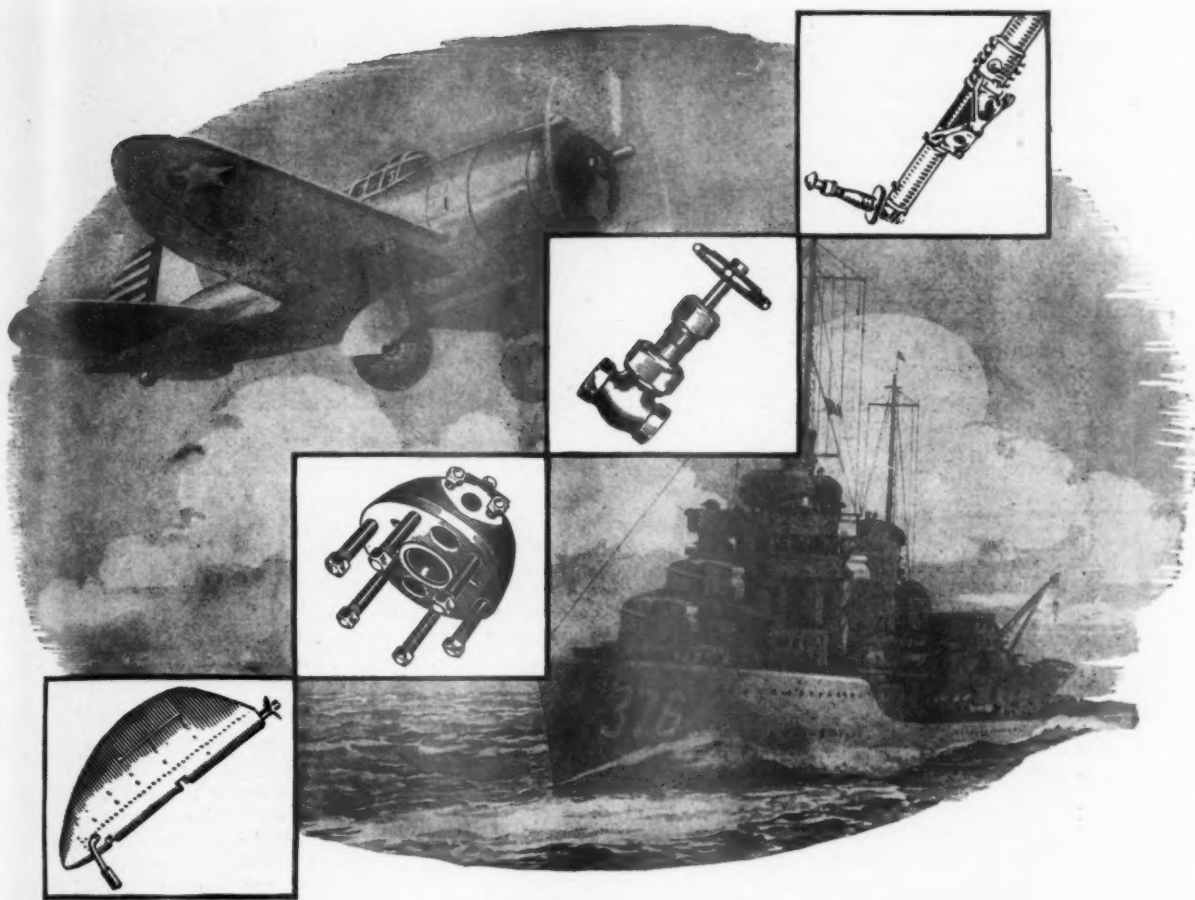
India is the crux of the crisis this



COVENTRY REBUILDING

They might not be serious contenders in a beauty contest but the new-type homes that are springing up in Coventry—British city which suffered so

heavily during the Nazis' terror bombings—are as nearly blast-proof as men and materials can make them. Besides being able to withstand a 500-lb. bomb dropped 30 ft. away, the structures are rot-, damp-, and fireproof.



No Whole is Greater than its Parts

Sub-contracting in our National Effort

Great as is the industrial giant that is America, the nation's strength is not alone measured by its large organizations. Vital to the success of our arms effort are the smaller enterprises—playing a part often unseen and unknown to most people, but of major consequence today.

More and more, the sub-contractor is called upon to help speed over-all production. In the next year he is destined to play a far greater part than in past months. As the full victory effort reaches flood tide, armament worth billions of dollars necessarily must be produced

under sub-contract each year.

Now, in this transitional period, sub-contractors face the necessity of installing new machines, of retraining personnel, of making many other adjustments. Time and credit are required. It is in the latter capacity that the Chase National Bank can be, and is, of assistance to many established manufacturers. That the wheels of arms production may turn more quickly, the Chase offers its cooperation not only to direct contractors but also to sound enterprises, large or small, which are capably undertaking indirect defense work.

THE CHASE NATIONAL BANK

OF THE CITY OF NEW YORK

Member Federal Deposit Insurance Corporation

week, but not because of the failure of the Cripps mission. London will win or lose the showdown in the Bay of Bengal on the basis of the military and naval forces and the supply bases already there. Nothing that could have been accomplished this year as a result of the acceptance by India of the London plan to grant the country dominion status after the war would have made any difference in the battles already under way in the Indian Ocean.

Attack from the East

Tokyo's whole strategy in India—as in Malaya, the Netherlands Indies, and the Philippines—is to strike before the United Nations can get mobilized. The battle for India will be won or lost on the troops that are in India now, and not on any that might have been mobilized by the Indians under the London program.

It is typical of Axis strategy in this war that India is being attacked from the east rather than from the northwest where Britain for decades has maintained a miniature Maginot Line of fortifications stretching from Karachi, past the famed Khyber Pass, to the Chinese frontier.

Industries at Stake

If Japan wins control over the cities of India's Bengal coast, it will have almost complete control over the rich mica and jute industries, the great Tata Iron Works southwest of Calcutta, and the rich tea and coffee plantations in Ceylon and southern India. Burma can supply ample oil for all ship operations in the area.

The great tanneries of Madras can supply Japanese forces with shoes, and Madras and Calcutta textile mills can outfit the troops. But to Tokyo and Berlin, India—for the present—is only a stepping stone to the Middle East, and Ceylon may be the only region that Japan, for the present, may attempt to occupy.

Japan Is Strained, But—

This is the crisis which the United Nations face during the next few months. Japan's supply lines are long and tenuous. Its industries and shipping are strained. Its conquests are feebly held by a handful of troops at key points, but the probable resistance from the occupied countries is also small.

In Europe, Russia may have unexpected reserves to throw into the battle so that Germany's dream of a blitz thrust through the Middle East may be foiled. Or Britain may be ready at last to stage a full-scale invasion effort when Germany is fully engaged on other fronts.

The crisis is fast approaching; the outcome of the Middle East showdown will soon be known.



INDIA'S DEFENSE COUNCIL

With Japanese troops now solidly based in Burma, Japanese planes raiding vital defense posts in Ceylon, and strong Nipponese naval units operating in the Bay of Bengal, the Defense Consultative Committee for India,

headed by General Sir Archibald Wavell (head of table), Commander-in-Chief of United Nations forces in India, swung into action this week. The committee represents the nearest approach to a Supreme War Command on which the Indians themselves are officially represented.

Controlling Jobs

If plebiscite is favorable, Canada will freeze man power in present employment to ease transfer to essential war work.

OTTAWA—In the current rapid speedup of Canada's total war expansion program, the most drastic move on the board is the freezing of all man power in its present employment. Ottawa authorities aren't entirely silent about it because the timing is tied to the result of the Dominion's vote on Apr. 27, which will determine whether the government is to have full authority to conscript man power for overseas service.

• **Basic Part of Program**—Actually, the plan is already a basic part of the new man-power program under the Director of National Selective Service, E. M. Little, who is on loan from Anglo-Canadian Paper Co.

The move is planned as a necessary preliminary to the orderly transfer of more and more workers from nonessential to essential occupations. The basis of this transfer is to be a complete nation-wide inventory of man power showing the numbers, classifications, and location of all workers. It is proposed to make this inventory effective by preventing the indiscriminate shifting about of workers pending their transfer to more vital employment. It copies some aspects of Britain's wartime labor controls (BW—Apr. 4 '42, p. 46).

• **What Poll Will Mean**—If a preponderant "yes" vote is registered in the

Apr. 27 plebiscite, it will be interpreted as meaning not merely that Canadians are willing to have Ottawa use them in whatever way will help most to win the war, but that they insist on it. Such a vote will bring early application of the plan to freeze man power.

A slim affirmative majority will delay it at least until actual war developments made the total use of man power imperative.

A "no" majority would postpone it indefinitely.

• **Quebec Holds Key**—The result of the plebiscite is something of a national gamble, with Ottawa betting heavily on an emphatic affirmative answer to the government's appeal for a free hand to make the utmost use of the nation's resources for the defeat of Hitler and Hirohito. Quebec holds the key to the answer.

A noisy campaign against the government's request is being conducted in French Quebec, with young isolationists (Canada Firsters) making demonstrations in cities and towns. All political parties, however, are campaigning for a "yes" vote, parliament being in recess for three weeks to give them an opportunity to stump the country and mobilize opinion.

• **Total Mobilization**—Ottawa believes it is taking the most effective preliminary steps toward conversion of the country's man power to war effort. First moves, made before parliament adjourned, were the freezing of farm labor, barring of restricted occupations to men of military age except by permit, extension of military age to 17-45, and appointment of a director of national selective service.

Freezing of all man power preparatory

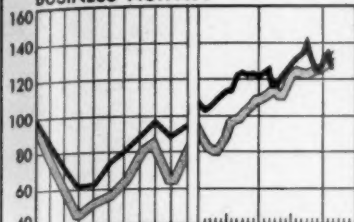
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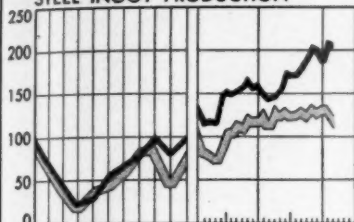
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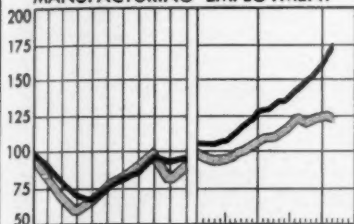
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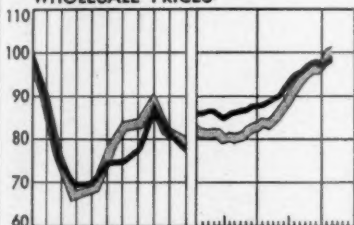
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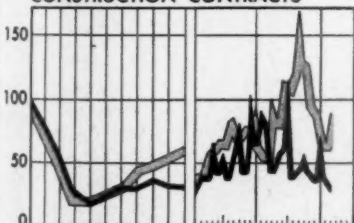
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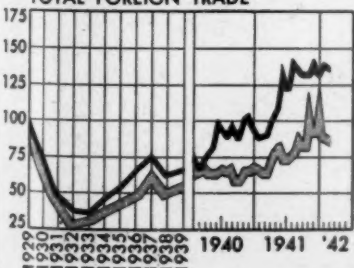
WHOLESALE PRICES



CONSTRUCTION CONTRACTS



TOTAL FOREIGN TRADE



© BUSINESS WEEK

to transfer fits in as the next major move.

• **Features of Plan**—Main points of the pending plan:

(1) It is to be mainly regional, to avoid increasing transportation and housing difficulties by the movement of workers from one war production section to another. As far as possible, war work will be brought to the workers rather than workers to the work. Subcontracts will be distributed with this factor in view.

(2) It will encourage management-worker committees which will speed the upgrading of labor, encourage the development of production shortcuts, and smooth the way for the shifting of workers to jobs for which they are best adapted. Employers will be urged to go in more for personnel management.

(3) As far as possible, new workers are to be trained fully before they are called for war plants. For this purpose, federal-provincial technical training centers and plant training systems will be expanded (BW—Apr. 4 '42, p. 46).

• **Assess Labor Needs**—While the inventory of available man power is being completed, Director Little is undertaking an assessment of the current and future labor requirements of Canada's essential industries. War plant managers and organizations like the Canadian Manufacturers Assn. are helping.

Time is being saved in organizing the selective service system by using the Dominion's unemployment insurance setup as the framework. Local managers of the insurance system over the country will act as selective service officers. When the surveys of resources and requirements are completed, Director Little will know where workers are going to be needed and where they are available in their own districts.

• **Compulsion May Come**—Present planning doesn't call for compulsion in effecting the transfer of workers, although this may come. Substitute means are expected to be effective. If an appeal to a worker to shift from a civilian to a war job should not be enough, it will be easy to put pressure on him. His civilian job may be liquidated by restrictions on his civilian employer's operations. Already employers are barred from preventing the voluntary transfer of skilled men needed in war industry.

Any male applicant (the restrictions do not yet apply to women) for a job in a restricted occupation (and these now include almost any civilian industry) now has to secure a certificate from the local selective service director if he is between 17 and 45. If there is no opening for the man's services in essential industry, a temporary certificate is granted. Otherwise, the control already works rigidly.

• **Scope of Program**—In over-all effect the whole man-power policy is intended to touch 300,000 Canadians this year: 200,000 required for combatant services

HOW TO SOLVE

Your Industrial Finish Problems on War Products

JONES-DABNEY CO. has industrial finishes to meet a wide range of government specifications and to fit your own production schedules.

With a substantial part of our production facilities and our research laboratories converted to war needs, we are prepared to deliver promptly lacquers, varnishes, enamels, synthetic resins and paints meeting U. S. specifications.

All our knowledge gained through years of service to industrial manufacturers is available to give you finishes that meet government 'Specs,' and our trained field men are ready to show you how each required specification may be most efficiently and economically fitted into your production program.

Write today for our useful new booklet on U. S. specifications, and the finishes required for your war production.

Jones-Dabney Co.

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"Business Week appeals to us as a comprehensive and quick-reading survey of current conditions and we believe the majority of people in business can find in your periodical much of interest and profit."

COMPTROLLER

Airplane Engine Manufacturer

and 100,000 for war industry. This is exclusive of workers frozen in agricultural employment.

The Washington-Ottawa agreement announced last week-end for a saw-off in production of scarce farm products as between Canada and the United States may be traced directly to Ottawa's price ceiling administration and its problems in maintaining the price roof. The plan has been under consideration since early in March (BW-Mar.21'42,p36). Originating with the price ceiling organization, it was passed on to the Canadian Section of the Joint Economic Committee and eventually secured the approval of the two administrations.

● **"One of the First"**—Although the initial arrangement is limited to promoting production of soybeans in the United States, for the vegetable oil needs of both countries, and corresponding expansion of coarse grains and flax crops in Canada to meet needs on both sides of the border, it is noted here that Prime Minister King described the move as "one of the first" positive actions on the agricultural front to advance war collaboration between the two countries.

Ottawa officials do not see any openings for early extension of the joint farm production plan, but some regard it as a wedge in an eventual drive towards continental rationalization.

● **Guarding the Roof**—Apart from ensuring adequate supplies of scarce products, Ottawa's initial interest is in securing them at the lowest costs in order to protect the price ceiling. This concern is underscored by a widening necessity for subsidizing primary products to maintain the retail roof. As ceiling administrators see it, production for both countries should be intensified on whichever side of the border it is cheapest. They hope that extension of price control in the United States may swing Washington officials to the same viewpoint (BW-Apr.11'42,p5).

The provision for the seasonal exchange of farm labor will help to ease an actual labor shortage in Canada.

● **Drive on Overhead**—The Gordon price control administration is stiffening its attack on overhead costs in production and delivery of consumer goods. Extensive surveys are being made into such costs in the bakery and milling industries, in the hope of saving subsidy costs which have been necessary to maintain the ceiling in the face of a 20¢ boost in the guaranteed price of wheat.

Although retail deliveries are now under mandatory restrictions, surveys indicate that a far smaller proportion of bread buying is on a cash-and-carry basis in Canada than in the United States. Canadian bakery interests deny that this is a substantial factor in overhead costs. Committees from the industries are working with ceiling board officers on simplification plans.



BIGGEST FILE

English workmen, like American, buy defense stamps to help pay for the war. In one corner of the war savings record office in London, 2,000 women are constantly busy keeping up to

date the 580,000,000 index cards on which the records are kept. Piled on top of each other, the card cabinets, according to London officials, would stand as high as Mount Everest. They constitute the world's largest index file, the British claim.

Retailers' War Ills

England's experiences in two years of conflict summed up in Board of Trade survey. Prospect for 1942 is held "bleak."

"Our survey reveals a bleak prospect for retailing in 1942." So begins the newly-published report of a special committee of the British Board of Trade which has been studying the problems of retailers (not including the food field) in Great Britain after more than two years of war.

● **Wartime Trends**—Basis for their pessimism are these key developments in wartime merchandising in Britain:

(1) Sales volume is now almost completely circumscribed by the rationing system. At the beginning of this year, volume of clothing sales had been cut to roughly half the prewar total. Since then the government has announced a further 25% reduction in clothes rationing to begin June 1. In other lines the cuts are even greater, and further reductions are inevitable.

(2) Utility clothing, planned originally to assure supplies of essential garments at reasonable prices for the half of the population which is in the lower

income brackets, is gaining in popularity and represents a rapidly increasing proportion of all clothing sales. Since the markups on all utility garments are rigidly controlled by the government at each stage from manufacturer to retailer (20% of cost price for wholesalers, 33½% for retailers), there is no opportunity for executives to adjust either manufacturing or retail margins on these items to meet fixed overhead expenses, which are increasingly hard to cover on a declining volume of business.

(3) Most household supplies are more drastically curtailed than clothing, though rationing, so far, is controlled only at the manufacturing level. But there are signs that these rations will be further slashed in 1942. The quotas for floor coverings have already been cut from 33½% to 25% of prewar levels. The production of quilts, bedspreads, and table cloths has recently been prohibited. And though the quota for cotton blankets is 50% of prewar levels by yardage, manufacturers have recently been unable to get sufficient raw materials to produce even this amount.

(4) While large department stores, chains, and cooperatives still have some leeway to meet the problem of declining volume and controlled profits, many of the small shopkeepers who have hung on in the hope that the war would be short will be compelled this year either

RESEARCH OR ELSE

Business must build on real and constant research—or else.

Better laboratories make better research—for war or peace.

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UNION SPECIAL



SEWING MACHINES for the Battle of Production

IN today's Battle of Production, common, "garden-variety" machines are often at a great disadvantage. **IT TAKES SPECIAL EQUIPMENT TO WIN!**

That's why Union Specials are used for producing virtually all types of sewed articles necessary in modern warfare. With over sixty years' experience in building more special sewing equipment than any other company in the world, Union Special stands ready to help you serve our country.

What's Your Problem?

TELL us your requirements for sewing equipment and we will make recommendations promptly. **UNION SPECIAL MACHINE COMPANY, 408 N. Franklin Street, Chicago, Illinois.**

to merge temporarily with fellow retailers or to close for the duration. Of the 300,000 nonfood retailers in Britain, 250,000 are small independents who are bound to be seriously squeezed before the year is over.

• **Government Criticized**—Like the intrepid London Economist, the Board of Trade committee decries the fact that the government has made no move to force a concentration of the retail trade just as it long ago forced civilian manufacturing industries to merge (BW—Dec. 20 '41, p. 30).

As matters stand, the only relief that Britain provides is in the so-called Liabilities Act of 1941, which makes it possible for a trader who is "already in serious financial difficulties owing to war circumstances" to call in a Liabilities Adjustment Officer. This official is authorized to give all aid possible in settling claims of creditors without forcing upon the shopkeeper the stigma of going through bankruptcy proceedings.

• **Tips for Americans**—Culled from the survey are these tips for American retailers who are trying to hedge against similar developments in this country:

(1) Since stock replacements are available, once rationing begins, only against the surrender of coupons collected from customers, the shop with the biggest and most complete stock when rationing was introduced was best fitted to maintain maximum volume.

(2) Since trade volume is automatically slashed when rationing begins, it is wise to shift quickly to lines which turn over rapidly.

(3) Department and chain stores can adjust themselves to war conditions by cutting down floors or closing outlets (they may be able to rent the unused space for war storage). Cooperative stores—since they often deal mainly in food—are comparatively well off in a wartime economy. Small independents should retrench at the first sign of rationing, and consider merging with neighbors or closing for the duration if they cannot cut overhead enough to operate on greatly reduced turnover.

(4) Here's what happened to individual lines in Britain, as reported in the survey (percentages represent portion of prewar output, by value, in current quotas):

Bedding, 50%; floor coverings, 25%; furnishing fabrics, very small because they require surrender of coupons which people can use for badly-needed clothing; linen sheets, none; woolen blankets, 30%; pottery and glassware, 20% (except tumblers and jugs, 40%); hardware, very small except for prescribed necessities; footwear, down from 131,000,000 pairs to 96,000,000; drugs, nearly 100%; toilet goods, 25%; paper for books, 40%–50% by weight; paper for periodicals, 20% by weight; bicycles, 25%; tobacco, 100%.



MORE GAS—MORE RANGE

Since there are no gas stations in the mid-Atlantic, and since service at mid-Pacific islands has been curtailed for the duration, bombers being ferried across now carry auxiliary gas tanks

which greatly increase their normal range. With automobile production stopped, workers at Fisher Body Division of General Motors are now turning out auxiliary fuel tanks for bombers using assembly line, mass-production methods.

Silver Sleeves for Horsepower!



OFFICIAL PHOTOGRAPH, U. S. ARMY AIR CORPS

In modern warfare, mastery of the air is a matter of horsepower. As horsepower is whipped up, however, bearing pressures become so high that bearing surfaces are subjected to terrific pounding and fatigue stresses. But silver, with its tough, homogeneous structure and its high heat-dissipating properties, provides surfaces for bearings, bushings or connecting-rod pins that can withstand today's heavy loads . . . and tomorrow's, too.

Engineers literally have found a silver lining in the Mallosil Process . . . Mallory's perfected method of bonding rare metals to base metal backings. This process can be applied to ferrous and non-ferrous metals, even when heat treated, without changing their physical properties.

Besides serving so usefully in aircraft bearings and other parts, this versatile Mallosil Process has been applied to such products as outdoor and indoor disconnecting switches; circuit breaker members; relay parts; fuse

clips, electric adding machine parts, headlight dimmer switches; solenoid contacts; silver-coated wire, strip and sheets.

Brilliant research was responsible for this development, typical of the many achievements in the past by Mallory engineers . . . who have created improved resistance welding electrodes that join metals faster . . . contacts and contact assemblies that make and break electrical circuits in a hundred-and-one common electrical devices . . . switches, noise filters, rectifiers, vibrators, condensers and a host of Mallory Approved Precision Products.

Mallory now plays an increasingly effective part in wartime because Mallory engineers have pioneered so continuously in accelerating peacetime production. New developments not only have genuine significance in speeding the effectiveness of war production, but imply increasing usefulness for Mallory products in post-war industrial growth. You may find some of these developments of great interest to your own business. P. R. Mallory & Co., Inc., Indianapolis, Ind. Cable "Pelmallo".



MALLORY <small>P. R. MALLORY & CO., INC.</small>	<small>SERVES THE AERONAUTICAL, AUTOMOTIVE, ELECTRICAL, GEOPHYSICAL RADIO AND INDUSTRIAL FIELDS WITH . . . ELECTRICAL CONTACTS, WELDING ELECTRODES, NON-FERROUS ALLOYS, POWDERED METAL PRODUCTS AND BI-METALS . . . RECTIFIERS, DRY ELECTROLYTIC CAPACITORS, SPECIAL HIGH RATIO ANODE PLATE CAPACITORS, VIBRATORS, VITREOUS RESISTORS, POTENTIOMETERS, RHIOSTATS, ROTARY SWITCHES, SINGLE AND MULTIPLE PUSH BUTTON SWITCHES, POWER SUPPLIES, BATTERY BOOSTERS AND CHARGERS</small>

MARKETING

Listerine Test

Federal Trade Commission action against Lambert Pharmacal Co. threatens showdown on effectiveness of antiseptic.

Buried in the tumult of war and almost forgotten by the trade press, a vital struggle is in progress between the Federal Trade Commission and the Lambert Pharmacal Co. over the latter's right to advertise its product Listerine as a preventive for colds, dandruff, and halitosis. On the outcome of the squabble hinges the fate of the whole multi-million dollar mouthwash and antiseptic industry. Also at stake is alcohol's old reputation as a down-to-earth germicide. Certainly this reputation will be dragged over the coals, for alcohol is the standard ingredient of most mouthwashes and antiseptics.

After eight months of testimony, occupying some three dozen volumes, the case of FTC vs. Lambert is now in a temporary lull. Resumption is due later this month, and—depending on who eventually wins or loses—the Supreme Court looms at the end of the legal trail.

• **Case Against Antiseptics**—FTC contentions may be summed up as follows:

(1) Mouthwashes and antiseptics have an alcohol base, which—all claims to the contrary—is the main germicidal agent. Moreover, the alcohol produces a synergistic effect (that is, it aids the other ingredients in doing their work).

(2) But diluted alcohol is a very weak germicide, worthy of only modest advertising puffs.

(3) Though allegedly weak as a germicide, diluted alcohol is strong in toxicity. In layman's language, this means that alcohol sometimes may be more effective in retarding the beneficial action of white blood corpuscles than in killing off the invading germs. In short, on open cuts and sores it supposedly works better with the bad bugs than against them.

• **Firing Broadside**—The current ruckus which gives rise to this line of argument, so fruitful of future trouble, started in 1940 when the FTC cited Lambert for alleged misrepresentation in its ads. It was charged that Listerine was not a cure or remedy for dandruff; that it did not prevent sore throat or colds or quickly kill oral germs; that halitosis did not arise from decayed food particles in the mouth but from disturbances in the nasal passage and lungs.

But Listerine failed to wilt under this

wholesale complaint. Instead of subscribing to a cease-and-desist order, as it had done earlier when a more restricted complaint against just its dandruff claims had been made by the FTC, it decided to battle the case out (BW—Aug. 24 '40, p39).

• **Teaming Up with FDA-FTC** then consulted Dr. Henry Welch, senior bacteriologist for the Food and Drug Administration—an event which was notable in view of the estrangement between the two bureaus, existing since their five

year fight over which one would get the power to regulate advertising under the new food and drug law.

In consulting with Dr. Welch, the commission, which had won the right to police the ads, was doing more than extending an olive branch to FDA. It genuinely needed to buttress its case with scientific research, for FTC has no laboratories of its own. And in the years since Listerine became the classic advertising target of the "consumer movement," FDA has built up a considerable body of data bearing on the adequacy of antiseptics in general and Listerine in particular.

• **Welch Reports Tests**—Because of his extensive research into germicides, FTC



FRUIT PROTECTORS

From Southern California come two new but entirely different approaches to an old problem—that of preserving freshness of fruit. A thin coating of wax is applied to oranges (above) and other citrus fruits as a part of the Flavorseal process developed by Food Machinery Corp. The treatment slows up dehydration and at the same time is said to preserve color and flavor of the fruit for weeks longer.

Transparent and slightly porous bags of Lumarith Protectoid for packaging avocados individually (left) allow the fruit to "breathe" and also serve as a check in preventing dealers' stocks from ripening too quickly after removal from refrigerated cars (BW—Dec. 27 '41, p30). Ripening of an entire lot of fruit may be staggered by completely unwrapping some of them and making small perforations in the Protectoid bags of others.



"... and **KEEP YOUR POWDER DRY!**"



It was in 1642 that Oliver Cromwell admonished his never defeated British army, the Ironsides; "Put your trust in God, and keep your powder dry." That order applies equally today as when soldiers carried powder horns.

... FIBREEN is Keeping America's "Powder" Dry on Land and at Sea —

Powder, today, means shells, grenades, and bombs—and also planes, tanks, food, clothing, radios, range finders, surgical equipment, medicines and chemicals, electrical supplies; in fact, all the complicated equipment of modern warfare.

Damage to any of this material while in storage or in transit, while exposed on shipping platforms or yards, at docks or at supply dumps, can be just as disastrous, today, as water in the powder horns of Cromwell's musket men in 1642.

FIBREEN is doing its part in providing safe packing and protection for goods of war. It's tough and strong.

It's waterproof. Used as a liner or wrapping, it furnishes vital protection, guarding against damage by rain, dirt, sea water, salt air, and long exposure to all kinds of weather from extreme heat to freezing cold.

FIBREEN is a pliable, rugged paper—reinforced by wire-tough, closely spaced fibres running crosswise and lengthwise—embedded in two layers of asphalt, between two layers of strong kraft. It's inexpensive—an effective replacement for packing fabrics and materials no longer available.

FIBREEN is available to those in essential industries. If your product is in this class, write explaining what you make, and how it is now packed. We'll try to help you.

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EFFECTIVE *Protection* IN TRANSIT
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SERVING INDUSTRY, CONSTRUCTION AND AGRICULTURE THROUGHOUT THE WORLD



COMMUTER SERVICE

Because of increasing demand for parking facilities for bikes by commuters, Boston & Maine R. R. is installing racks at suburban stations.

elected to build its offense around Dr. Welch. And once Dr. Welch had his day in court as a witness, it became quite obvious that the world in which antiseptics live might be due for an awful upheaval. Here, in essence, is what he testified:

He said he took undiluted Listerine and let it attack some test organisms; that within 15 seconds it failed to wipe out the bugs in 29 out of 30 trials; that within 30 seconds it worked only half the time; that within 60 seconds it did the job 29 times, but failed the 30th.

Then, continued Dr. Welch, he made some experiments on toxicity, on the basis of which he gave Listerine an index of 3.28, which he explained as meaning, "3.28 times more toxic for tissue than . . . for the test organism." By way of comparison, iodine got an index of 0.79; bichloride of mercury, 3.14; and carbolic acid, 4.0.

Finally, as regards Listerine in general—and mayhap other antiseptics by implication—Dr. Welch stated:

If Listerine killed 99.9% of the streptococcus-hemolyticus in the throat . . . what was left . . . could readily cause an infection in that individual and, furthermore, he could transfer it to somebody else.

Question: But failing to get every one of them, there is no use in trying to get any of them out; is that it?

Dr. Welch: I do not think it helps much.

• **Continuing the Attack**—And having said that on the record, Dr. Welch did not forget it. In the latest issue of the American Journal of Public Health he has taken up the cudgels again in col-

laboration with Dr. Charles M. Brewer of the U. S. Department of Agriculture. Their article is entitled "Relative Toxicity of Certain Antiseptics Containing Soap and Alcohol," and it says:

The toxicity and germicidal power of 87 commercial mouthwashes have been determined. Only 9 of the 87 mouthwashes tested were found to be germicidal under the conditions of test, while 62 were toxic in a 1:5 dilution; 14 were toxic in a 1:10 dilution; 2 were toxic in a 1:15 dilution; 5 were toxic in a 1:20 dilution; and one each was toxic at dilutions of 1:25, 1:30, 1:40, and 1:50. (American Journal of Public Health, Vol. 32, No. 3, pp. 261-67.)

Specifically mentioned (among others) were Calox, Forhan's, Pepsodent, Sandford's, United Whelan's, and Vick's. All were assigned toxicity indexes greater than 2—meaning that the authors reported them twice as instrumental in impeding the work of the white blood corpuscles as in knocking off the germs used in the laboratory tests cited in the Journal.

• **A Standard Reference**—The FTC-vs.-Lambert tumult has rolled past the place where Dr. Welch uncorked his grenade, and has concerned itself with dandruff, sore throats, plus a multitude of other things. But with a sort of nostalgia, the FTC attorneys keep harkening back to the Welch theme.

For instance, medical witnesses are often asked (in effect): Would you operate with instruments sterilized only in Listerine? Would you advise nothing but Listerine in curing or alleviating the common cold? Such questions, of course, find their origin in what Welch said with respect to the germicidal powers of diluted alcohol.

• **Expected: An FDA Attack**—The persistence with which this attack repeats itself is now causing many an observer to speculate about what kind of action the Food and Drug Administration is contemplating with respect to Listerine's labeling, for FDA has jurisdiction over labels, just as FTC does over advertising. According to the Food, Drug and Cosmetic Act of 1939, the labeling of antiseptics is defined thus:

The representation of a drug, in its labeling, as an antiseptic shall be considered to be a representation that it is a germicide, except in the case of a drug purporting to be, or represented as, an antiseptic for inhibitory use as a wet dressing, ointment, dusting powder . . . (Sec. 201, o).

A drug or device shall be deemed to be adulterated if . . . its strength differs from, or its purity or quality falls below, that which it purports or is represented to possess (Sec. 501, c).

What all this adds up to is this: If a product is represented as an antiseptic, it must be labeled as a germicide, and its strength must be up to par. Now, ask observers, how does this tally with Welch's testimony that Listerine is an

allegedly weak germicide and won't do what the ads say? To date, there's been no answer.

• **Listerine Fights Back**—But despite the possibility of the assault taking a wider form, Listerine hasn't folded under the attack, either. In regard to its germicidal powers, other doctors have testified that it did alleviate colds, make its users more immune to disease, and readily killed bugs in the laboratory.

And Listerine's counter-arguments against alleged toxicity are taking on a masterful sweep. It has been testified that alcohol isn't the only toxic thing in the world, and that hot water, coffee, or whisky will raise Cain with the work of the white blood corpuscles, too. Ergo, imply the attorneys, why condemn Listerine on this score without crusading against water, coffee, whisky? Toxicity, they say, depends on where the toxic substance is placed—and whoever heard of injecting Listerine into the blood stream? The ads plainly say—swish it around in your mouth or daub it on your pate. If you happen to hit any white blood corpuscles there, don't worry: They're out of place and deserve what they get.

Sears Ersatz

Big mail-order house has long list of products—ranging from hosiery to refrigerators—using substitute materials.

Spread across the desk that—appropriately—used to be Donald Nelson's very own in Sears, Roebuck & Co.'s Chicago executive offices, last week lay fishing tackle made of all sorts of materials to take the place of items on the critical lists. Against the light blue walls leaned an assortment of rubber footwear, and substitute gadgets to go with it. Stacked on a corner of the carpet were unfamiliar paint containers to replace those no longer obtainable.

• **Preview for Directors**—The exhibit was assembled to give the big mail-order firm's directors a preview of the merchandise that Sears catalogs and retail stores will be offering when war restrictions really begin to bite. A little of it was represented as definitely better than the conventional products being replaced. Most of it was said to be just as good as the same items made of more familiar materials. The rest was confessed to be less desirable—but better than none at all.

The articles on display ranged from soft lines—men's and women's ready to wear, hosiery, shoes, blankets, and floor coverings—to hard-lines items including a refrigerator, housewares, three bicycles, and a full showing of plumbing goods made of noncritical materials, a Sears,

Roebuck & Co. specialty (BW-Apr. 11'42,p62).

• **Some Already on Sale**—Merchandise executives pointed out that it was merely a typical assortment, was by no means all-inclusive. Some of the items are already being marketed, some are being manufactured but not yet sold, and the rest are merely on tap for use when and if this becomes necessary. Alongside every ersatz item was the corresponding article out of this spring or last fall's catalog, for comparison.

The fruit of a year's development was a refrigerator box that meets the official ruling by using less than 20 lb. of steel. Principal materials are wood, masonite, and glass. The box holds 100 lb. of ice, is guaranteed to maintain a constant temperature of 50 deg. F. If, however, the purchaser happens to own a spare freezing unit—or, if he is able to purchase one when the war is over—he can convert the box into a mechanical refrigerator by placing the unit in the ice compartment.

• **For the Fisherman**—Interesting to the fisherman was a tackle box and its contents, all made of acceptable substitutes. The box and tray were of wood. Practically everything else was of noncritical plastics: fly and leader boxes, formerly aluminum; rod handles and floats, formerly cork; lures and spoons, formerly of chrome-plated brass.

Handy men around the house face assorted changes. Three successive stages of substitute paint containers were on display. First stage, black sheets, enameled inside and out; Sears expects these will be killed off by Washington very soon. Second stage, glass jars with metal caps, with plastic caps obtainable to replace the metal. Third stage, a five-gallon steel-hooped wood firkin with wood bung; this is as yet pure speculation, to be used if ever enameled steel drums must be abandoned in the big sizes for exterior paint. A paint brush made 50-50 of horsehair and hog bristles is claimed to equal the middle-grade Sears all-bristle brush.

• **Fleece But No Sheep**—The shoe department displayed two neat tricks. Fuzzy-wuzzy slippers, formerly with sheepskin lining and wool-felt upper, are replaced with rayon plush inside and out; it looks and feels identical to the wearer, though laboratory tests show it retains a trifle less of heat. Even trickier is a liner to be worn inside arctics to replace the traditional sheep-skin. The replacement looks and feels like the original, is actually sturdier and cheaper, but its cowhide outer and alpaca lining never saw a sheep.

Several types of rubber saving were shown. One was rebuilt golf balls. Sears buys antique balls from the public at 50¢ per doz. regardless of condition, and gets those recovered that measure up to the P.G.A. official standards (BW-Apr.11'42,p54). A composition sole



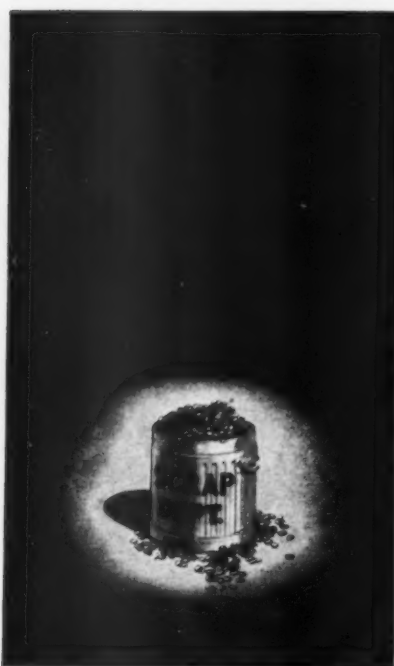
"Peep" or "Jeep" — today's steel horse is a typically American production wonder. Only 49 days after it was officially O.K.'d—but read for yourself this letter from Frank H. Fenn (below), President and General Manager of the American Bantam Car Company which developed this mighty midget:



"Working with the Army we designed the 'jeep' — and delivered the first only 49 days after its official approval! We here at Bantam know that 'war production' is more than another term for top efficiency on the assembly lines. It means all-out office production, too—speeding the reams of paper work, orders, memos, correspondence, etc., that must precede shop production. By dictating to Ediphones we cut out waste time, step up efficiency, and make life easier for secretaries and executives. *More work gets done — faster — accurately — and with less nerve strain.*" Materials that used to go into Ediphones now go for jeeps, planes and other fighting equipment . . . Make your Ediphones last by keeping them in A1 condition. Factory-trained Ediphone service men will call when you phone "Ediphone" (your city) or write Dept. B4, Thomas A. Edison, Inc., West Orange, N. J., or Thomas A. Edison of Canada, Ltd., 610 Bay Street, Toronto.

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REJECTED— BECAUSE THE WEATHER CHANGED!

Let factory temperature change 15 degrees, and delicate machines and gauges may vary by several ten-thousandths of an inch!

To eliminate the rejections weather changes cause, many manufacturers have air conditioned their precision departments. They speed assembly, too, in rooms where finishing department temperature is duplicated. And they facilitate varied operations and processes, and increase workers' output, by controlling temperature, humidity, and air cleanliness.

Yes, air conditioning *does* pay in factories—particularly if the installation is tailored to meet individual needs. That usually means decentralized conditioners, rather than a central system. Decentralization gives flexibility and economy. It permits meeting ideally the divergent needs of different departments; allows weathermaking to be suspended when a department is closed. It localizes the shutdown should a unit be damaged. And it permits quick, easy installation, usually without ducts.

Because no two plants present identical air conditioning problems, it's wise to consult a *locally experienced expert* if you're considering an installation. An ideal collaborator is your resident Fairbanks-Morse engineer. His judgment is bias-free, thanks to the completeness of the F-M line. To meet him, simply write Fairbanks, Morse & Co., Dept. D131, 600 S. Michigan Avenue, Chicago, Illinois. Branches and service stations throughout the United States and Canada.



FAIRBANKS-MORSE
Air Conditioners

containing no rubber looks, feels, wears like the former 20%-rubber sole.

• **Raincoats of Reclaim**—Old-type latex sponge-rubber cushion sheets for the inside of leather shoes were less soft and springy than those of 100% reclaim. Men's raincoats, formerly 100% crude, now use 100% reclaim, and are said to excel the original for durability, to equal it for aging, and to be inferior only for flexing.

Men's rubber work pacs are a prize instance of simplification: from eight different heights, colors, and qualities down to one, and it of a height that saves almost half the rubber. Two simplified bicycles—the OPA-approved Victory and delivery models—replace nine.

• **Substitute for Silk Hose**—Silk substitutes are used in women's raincoats, shower curtains, and other accessories. Rayon takes silk's place, coated with what Sears says makes a better product that won't harden or stiffen, though tearing strength is slightly less. The new raincoat sells for \$2.98, as against \$3.98 for oiled silk. Sears silk hose, formerly \$1, are replaced with mercerized combed-cotton at \$1.15.

Sears judgment of wool-substitute and mixed fabrics: A few are even better than the older products, but some are less desirable, representing a step downward from former top-end lines.

Miscellany: Automobile upholstery fabrics left over from Detroit's last assembly runs, are now lap robes; cake safes and canister sets of acetate plastic, replacing steel—not so enduring, but they will keep things fresh; cotton-center rug pads, instead of all-jute; carpet backing made of cotton and waste fibers of burlap, jute, and wool replacing the backing of 100% jute; hand knitting yarn, mixed low-quality and reclaimed wool, lacking luster, and softness.

TWO TURN TABLOID

Two old-timers among the nation's newspapers have newly converted themselves into tabloids—one of them for the second time.

Entry of Denver's 83-year-old Rocky Mountain News into the tabloid field is a sequel to a long fight against the circulation strength of the late F. G. Bonfils's Denver Post. The News was bought, along with the Denver Evening Times, by Scripps-Howard in 1926. After a costly circulation war, Scripps-Howard withdrew to the morning field, leaving the Denver Post unchallenged in the afternoon field. Since then, the News has neither made nor lost much money, but it has been unable to build mass circulation.

The New York Evening Post, "founded in 1801 by Alexander Hamilton," is the paper making the change for the second time. Deep in the depression, while still under the ownership of the Cyrus H. K. Curtis interests,

the Post became a tabloid. Standard size was shortly resumed, upon purchase of the paper by J. David Stern in 1934, and continued until a few days ago when Dorothy S. Backer, present publisher, announced that the Post would go tabloid again.

Superman Scores

Comic magazines become big business and, in some cases, problem for parents. Old-line publishers enter the field.

One powerful ally, ignored by admirals and generals, is counted on by the kids of America to confound the enemy if the going gets really tough. It is Superman, muscular fiction of comic strip, radio, movie, and merchandise. As every urchin knows, Superman stops 16-inch shells with his bare hands, lifts automobiles with one finger, flies through concrete walls without the aid of dynamite. He could just as cheerfully kick in the hulls of the Jap battle fleet or knock down Nazi bombers with his knuckles because he's always in there punching on the side of virtue.

• **One Feat Is Real**—To the juvenile imagination Superman is a real person. Graying business men can laugh at the fantasy but one of his feats is the real McCoy. Superman has shown the way in a new field of publishing—the comic magazine. Recent development of such publications is something to astonish anyone but their immature followers.

Every newsstand near a school or playground in our large cities has its layout of comic magazines. Boys and girls mull and shudder over these offerings, which usually picturize impossibly violent or magical feats in appropriately violent color. The price is 10¢.

• **Big Business**—On Dec. 4 a checkup revealed 148 comic magazines on New York newsstands. A breakdown showed 55 monthlies, 32 once-every-two-monthlies, 26 quarterlies, 32 one-shots or first issue releases, 3 digest-size occasionals. Together they constitute a big business.

It is estimated that nearly 15,000,000 copies of the comics are sold every month or an annual output of 180,000,000. Dime by dime, the total spent by boys and girls for such thrillers is said to be more than \$15,000,000. But that isn't all. The readership of these magazines is much higher than the number of copies.

• **Perusals Multiply**—Statisticians who have explored the phenomenon point out that the kids of the nation have evolved an informal but efficient circulating library technique. The buyer of one comic magazine lets his pals read it, in return for which he gets to read the ones they buy. Thus every copy

probably has an average of three scanners. On this basis the number of annual perusals reaches the astronomical figure of 540,000,000.

Such mild stimulants as Old King Brady or Nick Carter were small potatoes compared to the current rage for comics. Educators, parents, psychologists are worried about the effect of those half-billion impressions on the minds of developing citizens.

• **Difference of Opinion**—Publishers of comic magazines point out that right always triumphs in their offerings and protest that they stimulate nothing more dangerous than hero worship. Critics differ violently. Admitting that many of the magazines reprint harmless strips that run in newspapers, they charge that numerous features transmit disturbing influences to the young.

Many of the impossible feats pictured are accused of sending unstable kids off on emotional benders. Sex suggestions also are evident. One type of serial shows hot-looking gals in scant underwear pursued by villains bent on inflicting a fate worse than death. There are reports of boys dressed in the costume of comic magazine heroes being caught at crimes. And one of a boy who claimed he was Superman, therefore capable of unaided flight, cracking up in a jump from a second story window.

• **"Strain on Young Eyes"**—Most quoted attack on comics is an editorial from the Chicago Daily News of May 8, 1940. Some excerpts:

"Save for a scattering of more or less innocuous 'gag' comics and some reprints of newspaper strips, we found that the bulk of these lurid publications depend for their appeal upon mayhem, murder, torture and abduction—often with a child as the victim. Superman heroics, voluptuous females in scanty attire, blazing machine guns, hooded 'justice' and cheap political propaganda were to be found on almost every page.

Badly drawn, badly written and badly printed—a strain on young eyes and young nervous systems."

• **Parent-Teacher Target**—The comic magazine is a favorite object of denunciation at parent-teacher meetings all over the country. So far there has been no organized opposition. A recognized difficulty is that unintelligent drives against such periodicals will merely inflame juvenile curiosity and insure bootleg readings.

Parents' Magazine, New York, is fighting fire with fire. Its publishers admitted the legitimate appeal of color drawings, action, heroism. So they decided to publish comic magazines with beneficial suggestions. Parents' Magazine now has three such periodicals: Real Heroes, True Comics, Calling All Girls. They picture actual characters, eschew all extravagant "science" and magic. A combined circulation of 750,000 is claimed for them. Bell Syndicate

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Company **BW-4-18-42**

is promoting strips from these magazines for newspapers. Twenty-one dailies now run them regularly.

• **Others in the Field**—Curtis Publishing Co., revered owner of Saturday Evening Post, Ladies Home Journal, and Country Gentleman, is in the comic magazine field. Its subsidiary, Novelty Press, Inc., New York, issues two of the periodicals for children. Other thoroughly respectable companies have entered the field. One New York outfit (Funnies, Inc.) works up ideas for comic magazines to order, undertakes to furnish drawings to keep them going. A powerful argument for new ventures is Superman Magazine which is said to have grossed \$950,000 last year.

The first comic magazine contained only reprints of newspaper strips and is credited to M. C. Gaines, a former school teacher, who went into the newspaper syndicate business. Nothing spectacular happened until Action Comics brought out Superman about three-and-a-half years ago. Demand long ago outstripped the available supply of newspaper strips. Now hundreds of the serials provide work for a horde of layout men, pen-and-ink artists, letterers. The development also has opened an extensive new market for printing plants and paper manufacturers. It is said that advertisers have not yet realized the possibilities of these magazines for goods aimed at the juvenile demand.

Small-Store Woes

Retailers can't quite make up their minds how big to keep inventories. Advertising and delivery also pose problems.

Wartime problems of merchandising, personnel, and accounting which confronted department store executives who gathered last January for the annual convention of the National Retail Dry Goods Assn. (BW—Jan. 24 '42, p. 42) have become perceptibly more acute in the intervening period. And if the big department, dry goods, or specialty store is in a tough spot, the smaller retailer is in a much tougher one.

• **Small Store Meeting**—That's what showed up in the New York City get-together engineered by the N.R.D.G.A. last week for representatives of smaller stores east of the Mississippi.

Major discussion point at the big January meetings (probably as the result of a post-Christmas hangover) was labor—and how to get it. With the little fellows, inventories got the play. Major problems for small stores, approximately in the order of interest, are these:

• **Inventories**—Conservatives argued that a sharp postwar break in prices (which most retailers, remembering the fleecing they got in 1919, regard as inevitable) or over-all price ceilings are going to leave many stores looking mighty sick. They pointed out that the big-city stores which have set the pace in piling up inventories may turn their stocks over six or seven times a year; that the small fellow who has a turnover two or three times a year can't afford to follow their policies.

Those who favor inventory accumulation argued that a postwar break will not come immediately, will be delayed—as in 1919—and that this time retailers will be smart enough to take advantage of the interval to clear out high-cost inventories. In any case, they think a bird in the hand is worth two in the bush. For many little fellows the question is not how big inventories should be, but how to get them. As one New England retailer put it, "If anybody here has a high inventory, I'd like to know how he managed to get it!"

Most of the retailers present knew about the LIFO method of inventory evaluation (BW—Apr. 11 '42, p. 50), but figured they had enough headaches now without going through the trouble of breaking their accountants in to it. One man, who had figured it would save a tidy sum on his tax bill, said, "Thank God, then I won't have to mess with it," when he found no one else was adopting it.

• **Advertising**—Discussion on this anguished ill for the daily newspapers. About

half the retailers present said they were maintaining their customary sales-advertising ratios, not with the object of moving more goods but with a view to keeping customers with them as a hedge against a postwar slump and price ceilings, which would remove "buy now" incentives.

The other half, seeing no point in hawking wares which are all but walking off shelves (and seeing plenty of point in trimming to the bone in the face of increased costs and taxes) is slashing newspaper advertising. Some who were doing this reported they were making it up in extra point-of-sale display to compensate for the shortage of experienced sales help. Almost all were shifting advertising emphasis from price to quality and institutional, the extent of the shift depending on the keenness of competition.

Small stores increasingly are using radio. Three retailers with long-standing radio programs reported themselves well satisfied. One executive said a survey run by his store showed that a radio plug will bring only about 41% the response of an ad in the evening papers—but that the sales-advertising ratio for radio was only 3.2%, against 6.1% for newspapers.

• **Curtailment of Services**—Pooled and curtailed deliveries, charges for C.O.D.'s, gift-wrapping, and similar extras are now the rule in small communities as well as large. It has been hard for small retailers who compete with bigger stores in metropolitan areas to accept the necessity for trimming the extras which have been responsible for much of their business, compensating customers for higher prices. Some such stores reported adverse effects, but most retailers present said customers were accepting the defrilling in good part.

• **Labor**—Stores now accept this as a problem that will be with them in an increasingly acute form until the end of the war. Almost all are brushing up employee-relations, recruiting extra help from the ranks of high-school students. This is one place where the small store, with closer, less cumbersome management-employee relations, seems to have an advantage.

• **Credit**—Most stores reported few bad effects from the government curbs on instalment sales. Some said these had actually been beneficial, bringing a higher ratio of cash to credit sales and quicker payment even when not compulsory. Small retailers are worried by the proposed restrictions on charge accounts, but believe they won't prove too onerous.

RESULTS WITH LIFO

Two of the country's biggest department stores reported this week on their net incomes for the fiscal year ending Jan. 31, 1942. It was the first year

Landmarks of business progress



IN 1832 the British Government, seeing the need for a mechanical calculator, subsidized Chas. Babbage in an attempt to build a "computing engine."

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that either had used the LIFO method of inventory valuation to eliminate paper profits (BW—Apr. 11 '42, p. 50). Result: R. H. Macy's net income and tax bill were 30% less than they would have been if old methods of inventory valuation had been used; Gimbel Brothers' were 15% less.

Watching Credits

**Merchants in Philadelphia
pool their data in single bureau,
trying to keep up with prob-
lems arising from war effort.**

Philadelphia merchants and banks, watching with critical eyes the influx of defense workers and government employees, are counting heavily on a credit bureau of their own making to sort the wheat from the chaff.

● **Checking Up on Newcomers**—The bureau, set up six months ago to prevent a wave of defaults on time and charge accounts after Christmas, is now rolling in high gear to keep tabs on the credit references of strangers swarming into the Quaker City—including an army of 3,600 Security and Exchange Commission and Immigration Bureau workers moving lock, stock, and barrel from Washington.

The merchants would breathe easier, however, if the sole problem was new faces. Both they and the bureau are becoming well aware of the employment effects of rationing and freezing orders, especially on automotive labor where good payers are being turned into bad daily. One dealer, for instance, with previous excellent ratings, has admitted his lone liability is a herd of frozen cars—of no use in paying bills.

● **Draft Worries**—Before the priorities pinch, the perplexing problem was what to do about credit extension to men with no black marks of delinquency but liable to be scooped up by local draft boards.

Rising sales indexes and expanding charge accounts set the merchants to thinking last October, and brought the decision that dependence for credit references on 42 individual bureaus left too many loose ends in an era which might change from good to bad in a flash. They decided to pool their information, and thus the Credit Bureau of Greater Philadelphia, with Arthur C. Kaufman, Gimbel Bros. executive, as president, came to be.

● **Membership Grows**—A stock capitalization of \$100,000 was absorbed by the major retail stores, including Gimbel's, N. Snellenburg & Co., Strawbridge & Clothier, Lit Bros., and Sears, Roebuck & Co. To date the membership has reached 125, embracing oil firms, banks, and physicians, but ex-



LEE & SON

Air transportation came of age this week when First Officer Robert E. Lee of United Air Lines made his first flight as a co-pilot. In command of the plane was his father, Capt. E. Hamilton Lee, who holds the undisputed title of the flyingest man in the world, having logged 24,000 hours, or almost three full years in the air. Robert is a recent graduate of United's pilot training school; his father was a pilot on the nation's first air mail route between Long Island and Washington, D. C.

cluding John Wanamaker's and Dewees.

First chore of the bureau, managed by veteran credit man Charles F. Sheldon, was to thumb over cards against which were charged delinquent accounts, many long relegated to the stores' bad debt files. So far these have totaled 300,000, but many borderline cases are being salvaged.

● **Adjusting Old Debts**—The bureau has found that some delinquents, defaulting through unemployment rather than fraudulent intent, will listen to reason. These people, their pockets lined with money again, are applying for credit, and instead of being turned down cold are being summoned to the bureau to talk things over.

Sheldon and an assistant have persuaded about half of the delinquents who come in to pay up back bills and thus establish a clean credit slate. In some instances, price settlements with stores have been arranged. The rehabilitation service, current in other large cities, is novel in Philadelphia.

The newly established bureau has taken a toll on its competitors, 22 of which have gone out of business while two have bought in.

Food Conversion

Canners hit by tin order and other restrictions are turning to new products in own field, with dehydration as best bet.

The food industry now recognizes that it does not have a charmed life in a war economy. Any prewar feeling that food's number one spot on the list of civilian essentials would see it through actual hostilities with a minimum of discomfort was rudely dispelled in the four months that followed Pearl Harbor.

• **What 1942 Brought**—The first three months of 1942 brought one bitter dose after another—tight sugar controls, drastic conservation of tin, allocation of canned food packs, price controls on canned foods and pork.

By now, the food industry realizes that this was only the beginning. It knows that not all foods forced out of tin can go into glass, paper, and other containers with any hope of permanent safety; that new production machinery is hard to get, even for increasing the output of basic military and lend-lease foods; that, while the government intends to have enough food for everybody, the variety will be limited and the form may be changed; that distribution controls, resulting from the overloading of all transportation facilities, may impose drastic restrictions on nationally-advertised brands.

• **Conversion-Minded**—With this background, the industry, prodded by the War Production Board's Food Supply Branch, became conversion-minded. In setting up a full-fledged Conversion Section, D. C. Towson, chief of the Food Supply Branch, picked a man from that segment of the food industry which had tasted the bitterest medicine—the dog-food packers (BW—Mar. 7 '42, p34). Rush Watkins of the Ready Foods Co., Chicago, was told to see what he could do about converting food plants forced out of normal work by WPB orders.

Warned that his job would not be easy, Watkins started with canners who had been shut down by the tin order. He invited them to fill out detailed forms showing their machinery, plant space, labor supply, and management possibilities. At the same time, he began hounding WPB contract distribution and purchasing officials to see what work was available.

• **A Difficult Job**—The road was hard. Food plants had little to offer to war production except space, labor, and perhaps management. Early in the defense program, two of the largest food producers undertook government contracts to construct and manage war plants. But Watkins was looking for something for the small canner to do. As far as can



A standard Bullard Mult-Au-Matic machining an aeroplane engine cylinder head.

Plan For the Future **NOW!**

THOUSANDS of machine tools in automotive plants were designed especially for automobile production without thought of converting them to war work; others had to be rebuilt, and still others were not adaptable at all.

The automobile industry has always found Bullard Mult-Au-Matics especially profitable because they could quickly be switched to production on new models, frequently overnight. With equal speed, they have been switched to war work.

There's a lesson here for the man who expects to shift back to peacetime production after the war.

THE BULLARD COMPANY
Bridgeport, Connecticut

BULLARD

be learned in Washington, there is only one notable instance to date of food plant conversion—a Florida grapefruit canner has turned his machine shop to making speedboats.

With so many obstacles to inter-industry conversion of food plants, interest now centers on intra-industry conversion—the shift from peacetime food to products for which there is a wartime demand. Even this is limited, however, by the availability of raw materials, machinery, and experience. Best prospects for intra-industry conversion are: (1) dehydration, with new emphasis on vegetables (BW—Mar.21'42,p58); (2) frozen foods (BW—Feb.7'42,p31); (3) concentrated juices (BW—Aug.30'41,p31); (4) special-type military rations; and (5) new types of canned meat products and renewed emphasis on old types, many prepared especially for the armed forces.

• **Dehydration's Progress**—Dehydration holds the current spotlight. The other possibilities demand too much skill, experience, scientific background, and machinery made from scarce materials. Lockers are necessary to expand frozen-food production; citrus fruits must be available for concentration of juices; there is a limit to the quantity of special-type rations that the military forces will need; meat supplies must be assured for the production of canned-meat products. But a canner who has been packing vegetables has almost everything he needs except drying equipment to go into dehydration. Latest developments in the dehydrated field include:

(1) Formal announcement by the Army that it will buy at least 18,000,000 lb. of six dehydrated vegetables this year.

(2) Informal estimates that the government will buy at least 27,000,000 lb. of dehydrated vegetables this year, with the possibility that this will be increased with new British and Russian lend-lease requisitions.

(3) Appointment of R. Harry Amenta, formerly Surplus Marketing Administration purchasing official for dehydrated and concentrated foods, to head a dehydration unit of the Canning Section of WPB's Food Supply Branch.

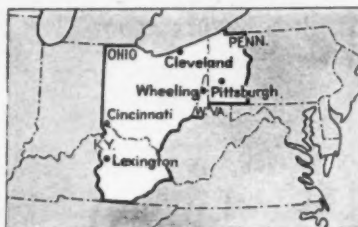
(4) Formation of a nongovernmental Independent Dehydrated Vegetable Committee with the help of National Canners Assn. and government officials.

(5) Plans for experiments to be conducted by Dr. William A. Noel, dehydration expert of the Agriculture Department's Bureau of Agricultural Chemistry and Engineering, on a cheap and practical dehydrator to be used by canners who wish to convert their plants. Money for the work was put up by four food companies, but results will be available to all. Work will be conducted at the Brunswick (Me.) plant of H. C. Baxter & Bros., from which came John Baxter, who headed WPB's canning section until this week, when he resigned.

The Regional Market Outlook

CLEVELAND (Income Index—153.4; month ago—151.2; year ago—125.6)—Now that most conversion dislocations are past (BW—Mar.14'42, p76), prospects in this Reserve district are beginning to outstrip the nation's, particularly since awards for new bomber, synthetic rubber, ordnance, and other plants are boosting payrolls sharply.

But trends vary from city to city. Layoffs are still going on at appliance-making Dayton, Ohio, and Erie, Pa.



74,027 sq. mi. pop. 11,809,528

RICHMOND (Income Index—167.2; month ago—161.4; year ago—134.9)—New awards for military camps and bases as well as for armament facilities flow persistently into this area, and income payments are advancing faster than the national average.

And the war stimulus is widening. In North Carolina, military construction will lift payrolls at Elizabeth City, Asheville, and, especially, Durham. Aircraft work is scheduled at Burlington and may spread to Charlotte. In Maryland, out-of-the-way Port Deposit and Cedar Point will boom.

Armament activity is still on the rise at the Norfolk and Washington naval bases, but continued expansion there and at Baltimore and Richmond (BW—Feb.14'42,p58) is threatened by potential bottlenecks in housing and transportation.

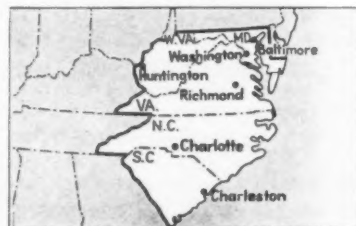
Farm income—now running about 30% ahead of 1941—is behind the na-

tion's. But southern Virginia and North Carolina tobacco-growers, who prospered last year (BW—Dec.13'41,p62), will increase plantings 11% this season. And cotton, which was hard hit by drought in South Carolina, will be up to full quotas this year. Despite the heavy military demand for foods in this region, attempts to diversify into dairying, livestock, vegetables, etc., are being stymied by shortage of cash and labor and inability to buy new equipment.

Yet Akron, Toledo, and, above all, this city are sharply on the upbeat (along with such arms towns as Hamilton, Canton, and Columbus). Eastern Kentucky, however, for lack of new plant awards, continues to lose population to Cincinnati and other war centers.

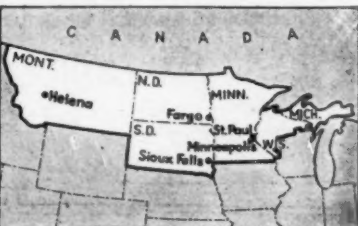
In western Pennsylvania—in such towns as Sharon, Beaver, Braddock—payrolls have risen more than average as the result of increased steel capacity, greater utilization of metal-working facilities for ship and tank parts, and expansion of propeller, aluminum, and other arms manufacture.

Of late, gains in farm receipts have not matched the nation's (though 1941 income was up about average over 1940). Livestock numbers, especially hogs, have lagged in Ohio (but not in Kentucky), and farm labor in this arms area is growing scarcer. Still, agricultural receipts from dairy and livestock marketings are likely to rise.



152,471 sq. mi. pop. 12,330,219

TWIN CITIES (Income Index—152.8; month ago—147.4; year ago—121.2)—Spring planting has just got under way, yet farmers already are looking forward to good harvests. Heavy rains last fall stored up an excellent bank of subsoil moisture and now acreage is being increased. Though 1,100,000 acres are being taken out of wheat, this will be more than offset by a corresponding boost in barley seedings, and a 1,500,000-acre increase in sowings



412,304 sq. mi. pop. 5,542,966

to flax, corn, soybeans, and oats. Feed crops are in particular demand because of the sharp rise in numbers of livestock on farms (BW—Mar.14'42,p76).

Thus far this year, farm income gains have outstripped the nation's. And government support of the butter market, just as peak spring milk marketings near, assures dairymen bonus returns. Wool prices are 15% above 1941, and to Montana sheepmen the present is the era of golden fleece.

Rural sales are still outrunning urban, and trade gains in North Dakota, central Wisconsin, and central Minnesota have been especially sharp. However, prospects here and in Duluth-Superior are improving as ordnance and shipbuilding contracts accumulate. A sizable manganese-reduction plant will stimulate business in Crosby-Ironton, Minn., and record ore shipments will lift sales potentials along the Mesabi and Upper Michigan iron ranges.

"Among friends"

Here we have a Pretty Big business man, in his softer moments. Old J. J. is known in the trade as hell on wheels, and is a holy terror in his office. But just now he's at home, and among friends.

The Sunday comics have been old friends for longer than he likes to remember. He knows Andy Gump better than he does any of his Vice Presidents. He often wishes his wife could dope things out as well as Orphan Annie, and that his son was as apt at getting untangled with young females as Li'l Abner. And if Superman ever came into his office, J. J. would hire him pronto.

Most people feel that way about the comics. They become acquainted with them before they learn to read; grow up with them, and the comics grow with them. They see these ink and paper characters more frequently than they see most of their friends.

The Comics Section is a "no-pressure" area. It brings no bad news, occasions no doubts, qualms, questions; entertains without strain or excitement; makes no demands on its audience... Can you conceive of a better background for advertising in these days?

Or a better opportunity for the advertiser to address his prospects "among friends"?

And Metropolitan Group not only has the best comics, with 75% adult readership of its comic sections... but the best readers as well. With more than 11,000,000 circulation, Metropolitan Group reaches one-third of the nation; and has its circulation concentrated in states that buy two-thirds of all consumer goods—reaches enough prospects to get action for any kind of outlet... And gets enough action so salesmen know you're advertising!

Details? Call any of our offices.

Metropolitan Group

Baltimore Sun • Boston Globe • Boston Herald • Buffalo Courier-Express • Chicago Tribune • Cleveland Plain Dealer • Des Moines Register • Detroit News • Detroit Free Press • Milwaukee Journal • Minneapolis Tribune & Star Journal • New York News • New York Herald Tribune • Philadelphia Inquirer • Pittsburgh Press • Providence Journal • Rochester Democrat & Chronicle • St. Louis Globe-Democrat • St. Louis Post-Dispatch • St. Paul Pioneer Press • Springfield Union & Republican • Syracuse Post-Standard • Washington Star • Washington Post

CHICAGO: Tribune Tower • DETROIT: New Center Bldg. • SAN FRANCISCO: 155 Montgomery St. • 220 East 42d St., N. Y.

PRODUCTION

Wood Can Do It

That's the theme song of the lumber industry as country looks for substitute materials. Adhesives expand applications.

Preliminary estimates of the U. S. Department of Commerce indicate that 32,600,000,000 bd. ft. of American lumber were cut in 1941, that 72.8% of that, or 23,730,000,000, went for war purposes—camp construction, military production, packaging, what-have-you. This year, it is expected that 35,000,000,000 will be cut.

But lumber is only "sawed wood," measured in board feet. Millions of cords of wood go annually into "secondary forest products"—pulp for paper, pulp for gun powder, pulp for rayon, "balsam wool" for thermal insulation, vanillin as a substitute for natural vanilla in food flavoring, lignin for plastics, an endless list of applications.

● **Problem of Reconciliation**—Currently officials of WPB's Bureau of Conservation are recommending wood as a plentiful material to replace various critical metals and non-metals. If this recommendation doesn't seem to square with the talk of conservationists about "our vanishing forests" it's because of the yeoman job which those conservationists have done over the years in selling private and public timber interests on selective logging, systematic reforestation, and waste utilization.

At the present time, the only threats of shortage which confront America are of temporary nature resulting from breakdowns in equipment or transportation or shortages of experienced labor.

Today our national stand of "saw timber" alone totals 2,500,000,000,000 bd. ft.—or more than 70 times the amount of lumbering that has been proposed for this year. The Conservation Bureau's recommendations are based on this figure.

● **Challenge to Ingenuity**—More significant, perhaps, than the quantity of wood available is the number and variety of applications to which it may be engineered. A manufacturer of pencils, who couldn't get sheet brass for the little eraser-holding ferrules on his products, was steered first to synthetic plastics as replacement materials, only to be euchered out of them by priorities. Now he is turning wood ferrules out by the thousands on an automatic lathe.

Northwest Airlines found it would have to await its turn for structural steel to support the roofs of new hangars

big enough to house DC-4's with a wingspread of 117½ ft. Rather than wait, it went ahead with a comparatively new method of building up long unsupported roof spans out of lumber. Just a few days ago, it announced the completion of the first such hangar.

● **Wooden Planes**—What's more, the wood hangars could conceivably house wood rather than aluminum alloy airplanes in the not too distant future. Ever since the advent of genuinely waterproof, synthetic resin (plastic) adhesives, less than ten years ago, plywood manufacturers have been nudging aircraft engineers into the adoption of their flat or curved multi-layered sheets of resin-bonded wood veneer. Remembering their experiences with blood-albumen plywood during World War I, the engineers tried the newer plywoods tentatively in floor boards and bulkheads, then on aileron surfaces, found they stood up.

From there they went to whole molded plywood fuselages and wing assemblies, put together by several processes—Duramold, Haskelite, Timm, Vidal—and now the government has con-

PLENTY AMID WANT—III

In the fashion of Mahomet and the mountain, manufacturers who can't fit materials to their products any longer, because of the inroads of priorities, are now fitting their products to the materials that are at hand. Cement is one of those materials (BW—Mar. 7'42, p62); glass is another (BW—Mar. 21'42, p47); and wood is a third.

tracted for production quantities of plywood training planes.

● **Reversing the Trend**—Once the public catches up with the major advances made in wood technology, a half-century trend away from wood as an engineering material may become a stampede back to the forest product. Rot, termites and, to a great extent, fire have been licked by modern wood preservation—pressure impregnation with creosote, chromated zinc chloride, sodium fluoride, synthetic resin, "Wolmanizing."

On a weight-for-weight basis, much wood has a greater tensile strength with the grain, than structural steel, and it can be made equally strong in all dimensions by resin-bonding several thin



SUBCONTRACT POOL

In addition to using the services of all their own workers, executives of the Bryant Heater Co., Cleveland, enlisted the aid of 70 other firms, large and small, in handling a subcontract for tank subassemblies. Pooling of effort was accomplished without erecting any new buildings, without buy-

ing any new machine tools, and without any temporary layoffs for retooling. According to Col. H. M. Reed, all, executive officer of the Cleveland Ordnance District, the pool was an outstanding example of getting a large number of companies into all-out war production. Pictured (left), S. H. Baldwin, vice-president, and Lyle C. Harvey, president of Bryant.



YOUR NEW PACKAGE CAN BE YOUR BEST PACKAGE!

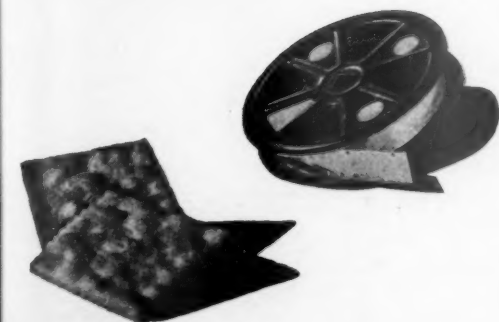


• Curtailment of certain packaging materials must not lead to inferior, "substitute" packages. A paperboard carton, properly designed and constructed, can be the best a product has ever had.

• Container Corporation's business has been built on that fact. Over many years, we have grown on products converted to paperboard, and maintained in cartons because they prove most efficient—for costs, protection, convenience and marketability.

• Package conversion has always called for *ideas*. We have built up an organization of specialists whose strongest point is new development work . . . experts in every aspect of packaging whose combined knowledge of construction, finishes and coatings, packing, distribution and merchandising is teamed to produce "the one best package for the job." From pulp to finished package, the whole procedure is in our control.

• Let us tackle your conversion problem in its entirety—with special reference to your existing packaging machinery and methods, as well as the product. For we know that the right package is the result of thorough, precise planning.

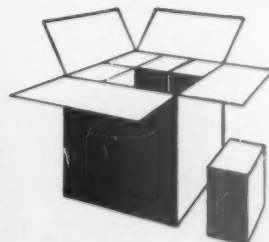


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When you think of Molded Plastics, think of **STOKES**

You save time, money and worry when you deal with Stokes, for all phases of our molded plastic service are carried on under one roof. Our services include

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Please, without obligation ☐ send full information about your custom molded plastic service; ☐ have one of your representatives call.

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Company.....

City..... State.....

sheets with their grains perpendicular to one another. Such is plywood. "Compregnated wood," which is just getting off to a start as a material for airplane propellers and other severe services, is plywood, not only bonded with synthetic resin but impregnated with it through and through, and compressed in hot presses under pressures up to 1,500 lb. per sq.in., until it becomes in effect a grainless plastic, bonded and strengthened by tough wood.

● **New Roles for Adhesives**—"Laminated wood" is usually lumber, but can be veneer, bonded "with the grain" by the use of various adhesives to achieve longer, heavier and more uniform members than could be cut and transported directly from the forest. "Plastic wood," which can be molded to various decorative and engineering forms after the manner of synthetic plastics, consists of wood fibers bonded together with natural lignin from the wood (as in Masonite panels and shapes) or with various added adhesives.

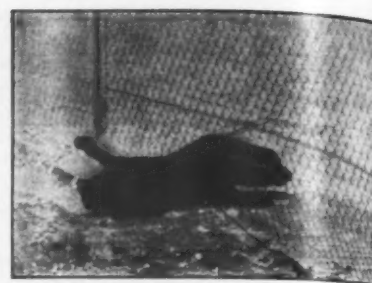
"Urea wood," so new that little has been revealed about it, is natural wood soaked in a solution of colorless, odorless urea crystals until thoroughly saturated. The chemical combines with the wood's natural lignin, forming a kind of a "natural-synthetic plastic." When such wood is heated to 175-200 deg. F, bent or twisted to various shapes, and cooled, the shapes "take a set." Unlike old-fashioned steam-bent wood, this one can be reheated, or straightened, and bent to a new shape. And it can be permanently set if the original solution has been given a shot of formaldehyde.

Except for compregnated and urea wood, the enormously versatile material has been used at one time or another for most of the uses to which it will be put now as an emergency replacement material. Freight cars, pulleys, bearings, drawer pulls, children's tricycles, office furniture, conveyor rollers, laundry equipment, refrigerators, truck bodies—all these and many others are about to complete the full cycle of wood to metal to wood. Wood will replace rubber in bicycle pedals, cork in life preservers, brass in lipstick holders, plastic in cosmetic jar tops.

How many of the emergency applications are going to stick as standard practices after the emergency, now that industry has turned again to wood technology, is anybody's guess—and metal-working industries are doing a lot of guessing.

PRODUCTION PYRAMID

Interested manufacturers say that the working experience of industry has provided an answer to those critics who have censured the armed services for piling new orders upon plants which already have war contracts. The big factors in the problem are machine tools



ACOUSTIC FENCE

If a stray dog decides to crawl under the "acoustic fence" surrounding one of du Pont's war production plants or if a would-be saboteur tampers with the fence—even in complete darkness—a danger signal is flashed to a central control room. In effect, the fence is one huge microphone which, in addition to picking up danger signals, may be used as a communication system between guards on patrol and the central guard office.



and supervision. Here's the reasoning:

If X machine tools handled by a single manufacturer will build 1,000 aircraft engines per month, then 2,000 engines per month can be built by the same manufacturer with 1.5 to 1.6 times X tools. And 2 X machine tools in the plant will build 4,000 engines.

If an existing plant capable of producing 1,000 motors per month were to be duplicated at some other point and managed by another company, the machinery of the second plant would produce only 1,000 motors per month. On the other hand, an equal amount of equipment added to that of the original firm would have produced 3,000 additional motors instead of 1,000.

And providing a supervisory force at the second plant would mean a greater drain on the nation's managerial and technical talent.

NEW PRODUCTS

Microfilm Reader

Although the new Spencer Microfilm Reader was designed for students and scholars as a relatively inexpensive instrument for the visualization of the many important books and documents now reduced to 35-mm. film, it can be used also by business executives for reading microfilmed copies of their records and papers. As manufactured by Spencer Lens Co., Buffalo, the outfit



consists of an electrically lighted projector at the top which throws clear enlarged images downward onto an easy-reading, specially tinted screen in the base. A darkened room is unnecessary.

Kem-Tone

One coat of "Kem-Tone," the new oil-less interior paint developed by Sherwin-Williams Co., Cleveland, will cover almost any old wall paper, canvas, plaster, wall-board, brick, cement, and paint. It dries in an hour or so to a flat finish, is "water-soluble at time of application but after 'curing' becomes absolutely waterproof."

Platelustre

Wartime restrictions on metals for electroplating and bronze-powder finishes have lead Maas & Waldstein Co., Newark, N. J., to formulate Platelustre, a new transparent, colored enamel for either air drying or baking. Applied to polished metals by spraying or roller coating, it "makes them resemble copper, brass, bronze, color-treated aluminum and steel, or other metals."

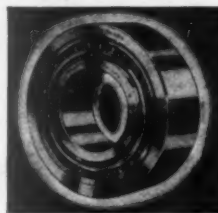
Safety Shoes for Women

Reasoning that the feet of the modern woman-in-industry are just as vulnerable as a man's to injury from dropped tools and materials, Lehigh Safety Shoe Co., Allentown, Pa., is bringing out new



YES, IT'S ONE OF "OUR BOYS" writing—but he's not being prejudiced. Hyatt's *do* play a major part in Army and Navy equipment... in tanks and guns and planes and ships... in the machines that make the machines of war. Everywhere, every day, precision-made Hyatt Bearings are serving well in America's drive toward victory.

Our young soldier's buddies in Department 9 at Hyatt are justly proud of him



— and he can be equally proud of them. For they are soldiers, too... in the front lines of industry... working with might and main, day and night... keeping a steady flow of vital parts for the fighting machines that our fighting men are using with such telling effect! Hyatt Bearings Division, General Motors

Corporation, Harrison, New Jersey, Chicago, Pittsburgh, Detroit and San Francisco.

THE 50TH YEAR OF **HYATT** ROLLER BEARINGS

PATAPAR in Hospitals, too

Patapar Vegetable Parchment has won a high ranking in the defense of America's health—as a food wrapper. But that is only one of its many vital uses.

At hospitals from coast to coast, physicians and surgeons are finding Patapar a great help in meeting their daily problems. Its clean sanitary structure and its ability to withstand moisture, grease, and boiling make this extraordinary paper highly valuable to the medical profession. Among its special uses are these:

Patapar is used for wrapping instruments and dressings to be sterilized in



the autoclave. It takes scorching-hot live steam, and it comes out as strong as ever.

In operations, Patapar, after sterilization, is used to protect the fresh wound edges from contamination and to protect tissues from injury from retractors.

In Patapar are combined all the essential qualities of oiled silk—without its high cost. Unlike ordinary paper, Patapar can be used as an emergency ice pack, because it is insoluble.



APPLYING PATAPAR
IN THE PATCH-TEST

INSOLUBLE, GREASE-RESISTING, TASTELESS, ODORLESS, BOIL-PROOF... these are the characteristics of Patapar which have enabled this unique paper to solve many baffling problems.

Today the use of Patapar for defense—for protecting foods—and in medical fields—is temporarily taking our capacity output. Nevertheless, with an eye to the future, now is a good time to get in touch with us to consider what Patapar can do for you. In writing, be sure to give us an accurate idea of your problem.

PATAPAR

Vegetable Parchment

Paterson Parchment Paper Company

Bristol, Pennsylvania

West Coast Plant: 340 Bryant St., San Francisco

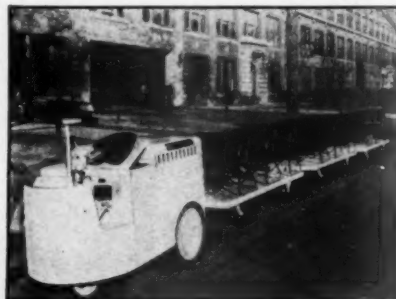
Branch Offices: New York, Chicago

Headquarters for Vegetable Parchment since 1885

Lehigh "Toe-Shield" Safety Shoes for Women, styled after nurses' shoes. In the toe caps are concealed double layers of a tough thermoplastic, lighter than the steel caps used in men's safety shoes, yet strong enough to withstand the impact of tools or materials normally handled by women.

Plant Transport

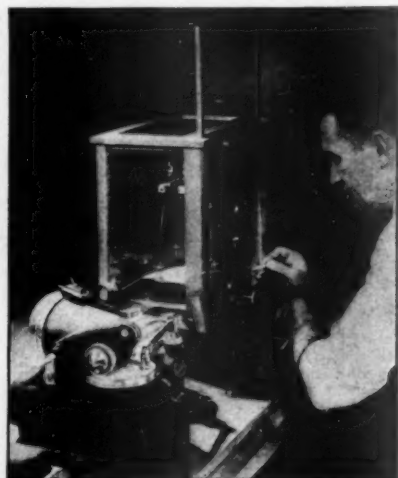
Equipped with detachable new Mercury Passenger Trailers, an electrically



powered Mercury "Tug" Tractor can be commandeered from its normal job of material and part handling to transport visitors and personnel through the aisles and grounds of practically any war production plant. Mercury Mfg. Co., Chicago, builds both items.

Abraser Vacuum Pickup

Newest accessory for the Taber Abraser—a test instrument for measuring the



abrasion resistance of electroplate, plastics, paint, lacquer, leather, textiles, etc.—is the Abraser Vacuum Pickup recently developed by Taber Instrument Corp., North Tonawanda, N. Y.

It is in effect a small vacuum cleaner for removing abradings that might interfere with the accuracy of tests by becoming imbedded in the surfaces of various materials or of the friction wheels that do the work. The pickup's nozzle swings out of the way while the instrument is being loaded or unloaded.

Stopping a "Run"

Caterpillar, with Army's aid, perfects plan to anticipate contractors' parts needs, and thus ends rush of overbuying.

Misgivings over possible shortage of maintenance and repair parts, particularly among contractors on military projects, caused a recent flood of parts orders from owners of Caterpillar Tractor Co. equipment. The aggregate of this precautionary buying bid fair to extinguish factory stocks of many supplies, and production was staggering to replenish lines thus threatened.

• **Army's Aid Asked**—Inspection revealed that many of the parts being ordered were of a sort almost never requiring replacement except in case of violent accident. And, inasmuch as most of the supercareful contractors were on military work, the company's parts division turned to the Army for help. The result was a "victory parts plan" to bring orders into line with actual needs.

As a first step, two factory parts men and two service men from the Carolina Tractor and Equipment Co., Caterpillar distributor, accompanied by Army representatives to oversee the chore, inspected 60 tractors and motor graders at Fort Bragg, N. C. They prepared actual estimates of all the parts required to place each machine in reasonably good condition, along with replacements likely to be needed soon.

• **Unfounded Panic**—What they found out fell so far short of the panicky demand of the previous months that Washington approved the plan without delay.

Now each Caterpillar distributor inspects, every 30 or 60 days, all equipment on military projects within his territory, his service men making the rounds along with experienced Army mechanics and clerks. A report of each machine is submitted to the distributor, to the Army Construction Engineers, and to the factory parts department. The factory, after recapitulating the requirements, thereupon schedules for shipment to the project storekeeper those parts needed now or probably to be needed within 60 days. Each lot is packed and marked for the particular machine for which it is intended.

When the plan was set up, the stock of parts held by the contractor was checked; anything in hand was deducted from what the factory was asked to supply.

• **On National Basis**—The parts plan, adopted progressively, project by project, is just now completing coverage of the U. S. It has halted the panicky run on the parts stocks and parts production departments.

Rays for Plywood

Electro-thermal presses, in use at Portland (Ore.) plant, are reported to have cut down both time and cost of operations.

A new process for drying or bonding plywood panels, using high-frequency electric current and cutting down operating time on an average job from two hours to about seven minutes, has emerged from the experimental stage and is now functioning in one Pacific Northwest plywood factory. It will be installed in two others as fast as equipment is available.

• **Greater Speed Claimed**—The development is particularly significant now, plywood officials say, because it will produce at greater speed and less cost the widely varying shapes and sizes required by plywood boats and planes. The M & M Plywood Corp., Portland, Ore., which has two of the Thermal presses (designed and installed by Thermal Engineering Corp., Richmond, Va.), is even experimenting with a "plywood tire" for trucks, believing the new method (together with phenol-resin glue) makes such a product feasible.

In nontechnical language, the equipment consists of a "broadcasting station," which "throws" high-frequency waves through the plywood panels in the press, much after the manner of diathermy



CORK FROM CALIFORNIA?

To relieve the shortage of cork, most of which comes from Spain and Portugal, Crown Cork & Seal Co. expects to plant 1,000,000 cork oaks in California next year and 2,000,000 in 1943, according to Charles E. McManus, president of the firm. European growers figure on a tree yielding after 15 to 20 years.

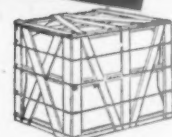


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equipment for heating and healing human bodies. The electricity doesn't heat the plywood, but it so activates the molecules of the wood as it passes through that they literally "writhe" and produce heat. Extremely high frequency is used because the degree of "writhing" depends on the frequency of the current.

• **Heats Uniformly**—One advantage claimed for the new method over the conventional hot press devices is that it heats uniformly. Hot presses now generally in use employ heat produced by steam-heated "platens," or hollow iron plates—a few by electrically heated platens. The plies, spread with glue, are placed between two such platens and are pressed together. This means that the area of wood in direct contact with the hot plate is heated first and most intensely. The panel core (the inner plies) get heat later—and less of it—due to the resistance to the flow of heat by the intervening wood.

Irregularities of surface thickness sometimes produce imperfect panels. The new high-frequency device produces heat of the same intensity simultaneously in all parts of the plywood. Surface irregularities, the sponsors point out, matter little because many panels are piled one upon the other, each compensating the adjacent panels.

• **600,000 Watts**—The two electrothermal presses installed by the M & M

company use 600,000 watts divided about evenly between the units. Allowing for conversion losses, about 200,000 watts pass through the plywood in each press. Incidentally, the electrical losses, represented by heat, are carried off by a cooling system.

One important advantage claimed for the new method is that it can handle thicker panels because the heat is the same everywhere. The conventional hot press devices, plywood officials explain, can handle only panels limited to an inch or less in thickness. That's because thicker panels take higher temperatures and longer application, and it is impossible to drive sufficient heat into the cores without maltreating the wood that is in direct contact with the hot plates.

• **Labor Factor**—Labor costs are said to be less on the Thermal presses because three men can handle two units whereas one conventional hot plate press often takes three to five operators.

CORRECTION

In a recent article discussing the impact of the war on the watch and clock industry (BW—Apr. 4'42, p68), Business Week reported that Bulova Watch Co. and Longines-Wittnauer are merged. This is incorrect. There never was and is no connection between the two companies.

LABOR

Shop Drive Grows

Production committee plan of WPB encounters difficulties in some plants, but there are also some conspicuous successes.

Joint management-labor committees, asked for by Donald Nelson in what is officially called the War Production Drive, have been organized in 550 plants. In March, some 2,500 firms were directed to report back to Washington as soon after Apr. 1 as possible on what was being done to get the committee plan under way. Reports are now arriving daily.

• **Hopeful Beginnings**—Among the first nationally known firms to announce that committees were already functioning in their plants were American Rolling Mills, Westinghouse Electric, York Safe and Lock, Owen-Illinois Glass, Colt Firearms, and White Motors. Other firms like Radio Corp. of America, which was running its "Beat the Promise" output-incentive program (BW—Feb. 14'42, p76) when the Nelson drive was inaugurated, proceeded to modify their schemes to incorporate Washington suggestions.

War Production Board agents representing management and labor have made 23 plant visits up to this week, helping to get plant committees started. Under their guidance, Bendix Aviation and Studebaker in South Bend, Nordberg Mfg. and A. O. Smith in Milwaukee, Link Belt in Indianapolis, and other representative firms have made hopeful beginnings.

• **Difficulties and Differences**—Currently, attention is being given to situations where difficulties and differences between unions and employers have thus far blocked the organizing of joint committees. A large West Coast Aircraft plant, a Middle Western electrical and farm machinery manufacturer working on important Army and Navy contracts, and an Eastern copper-fabricating firm exemplify the problems which are keeping some plants from joining effectively in the War Production Drive.

The aircraft firm is involved in a dispute with its C.I.O. union over the question of whether women, who make up a substantial section of the firm's production employees, should have a place on the production drive committee. The union contends that, with a limited number of places provided for employee representatives, it should name whoever it feels will be able to make the greatest contributions. Its nominations include no women, and



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the company has refused to proceed on such a basis.

• Union vs. Union—The midwestern firm has more than one union operating in its plant. The bulk of production workers are organized in a militant C.I.O. local which has, in the past, often struck to oppose what it maintained were attacks on its bargaining position. Now it is refusing to name representatives to a joint committee if it has to share representation with other unions. The employer insists that labor committeemen come from all organizations which have members in the plant. This argument has kept the plant from having any committee at all.

The copper fabricator is working a short week because of shortages in raw copper supplies. The company feels that establishing a joint committee to raise production would be pointless and would serve only to increase friction between union and company in a situation where labor relations are already strained.

• Letters to Washington—The union is insisting that the employer go through with the Nelson plan. It has written several letters to Washington denouncing what it calls the company's "unco-operative attitude." Recently it picketed the plant gates to call attention to the company's stand. Getting agreement is complicated by the fact that a collective bargaining contract expires soon and must be renegotiated; both sides are acting with an eye on their position in the forthcoming bargaining.

In contrast with the plants in which the drive has made no headway, WPB cites two examples where the drive is really rolling.

• Singled Out—The Wheeling Steel Corp. and C.I.O.'s Steel Workers Organizing Committee have been singled out by Washington for special credit. Wheeling's more than 12,000 workers mesh into the War Production Drive through 72 departmental joint labor-management committees, ten plant committees, and one top committee which sits in the company's general office. The Wheeling system is being used by WPB as a model for the promotion of the plan in other firms which operate through scattered plants.

The Crosley Corp. in Cincinnati and A.F.L.'s Electrical Workers Union have a top group of 24 on which sit 12 union representatives and such company men as the executive vice-president, the general manager of manufacturing, the works manager, the personnel director, and the vice-president in charge of engineering and research. Slogan: "Mister, we did our job and we did a good one."

Some of the labor representatives on the Crosley committee are women.

• Steering Committee—A subgroup known as the executive committee, which is made up of three management



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Catalog No. 60 contains complete information about the characteristics, dimensions, prices, and uses of all stock Micro Switches, with additional information on special switches.

Catalog No. 70 contains similar information for aircraft and aircraft accessory engineers, and others whose requirements are similar to those of the aircraft industry.

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and three labor representatives, acts as a steering committee and all reports clear through it for action. Reports emanate from a promotion and publicity subcommittee, which includes Crosley's advertising and sales promotion managers, and committees on performance, quality, suggestions, training and upgrading, plant efficiency, and safety.

The promotion and publicity committee maintains score boards and bulletin boards for the factory-wide dissemination of information on the program. It distributes news through various publicity channels and over the company's public address system; it conducts slogan contests, distributes and handles the display of production posters and stickers; it distributes prizes and awards in war savings bonds and stamps; and it keeps Washington informed of the progress of the drive.

• **Still Organizing**—Nationally, the War Production Drive is still in the organizational stage. The next phase will be a shake-down period of consultation, discussion, and experimentation. The third and final stage, if hopes are realized, will reveal a smooth-working system in actual operation.

There is some talk that engineers may be called in to run the second phase of the drive, which is now largely in the hands of publicity men. Also mentioned as a possibility is the transfer of the drive from the direction of WPB's Labor Division to that of WPB's Raw Materials or Industry Operations divisions.

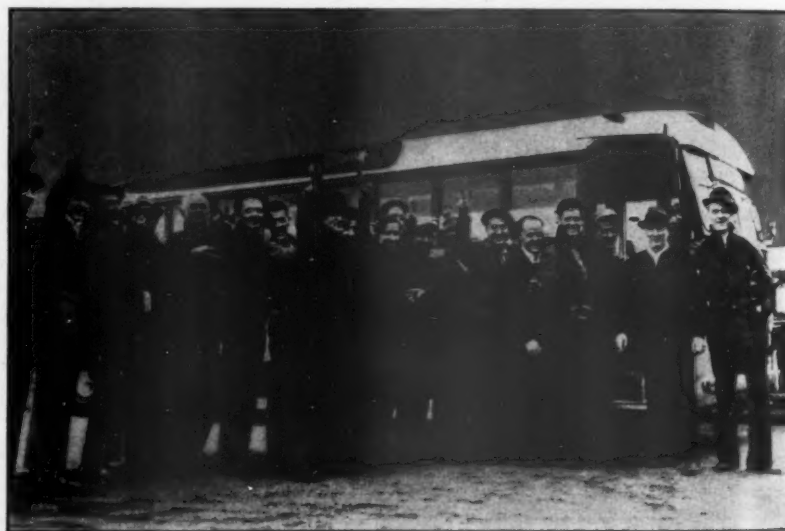
Milk Miners

Lewis and his U.M.W. open drive to organize dairy farmers of Northeast with higher prices as bait, but fight looms.

The gleam of the miner's lamp is flickering strangely among the stalls and stanchions of the New York milkshed these days as John L. Lewis launches the United Mine Workers' catch-all District 50 into Northeast agriculture. U.M.W. now appears ready to go back to the land, a development foreshadowed in early February by District 50's signing up of two dairy groups, 5,000 members of Michigan's United Dairy Farmers and a claimed 22,000 in New York State's Dairy Farmers Union.

• **Object of Drive**—Whether or not the Lewis move is destined to provide a farm stock leg for some future third house of labor, the present purpose is clear and the timing is good. District 50 intends to organize every dairy farmer (not hired hands) in the Northeast.

Dues revenue from such a field would, it is estimated, run \$4,000,000 annually, and since the organization drive has in mind a checkoff through milk handlers, expenses, beyond a couple of dollars organizing expense per head, would be negligible. Beyond that, presumably, is the national goal of 3,000,000 dairy



COOPERATIVE BUS

Started as an experiment a month ago, a cooperative bus service organized by employees of Baldwin Locomotive Works, Eddystone, Pa., who live in the direction of Berlin, N. J. (37 miles east), has proved so success-

ful that plans are now under way to provide transportation for employees living in other directions from the plant. The bus service not only saves wear on 40 private autos and 160 tires but also reduces total consumption of gasoline by 174 gal. daily, according to one estimate.

farmers, with a roughly estimated potential of \$20,000,000 for the labor group that cracks it.

Timing Is Accurate—Normally as pastures grow in the spring, milk production jumps, percentage of high-income fluid milk drops, and average milk prices are borne down. U.M.W. is hitting this period right on the button. It can point to Lewis' past successes in hoisting union members' incomes, can deny that strikes are contemplated (U.M.W. abides by the post-Pearl Harbor no-strike pact), and can claim that the goal of higher milk receipts for farmers will be achieved through pressure on milk handlers' margins by collective bargaining, not through higher prices to consumers.

On prices, however, this spring and summer may prove an exception. Milk prices have been rising without benefit of U.M.W., may easily go further. At \$2.43 per cwt. average price, and a total milk check of \$14,186,000, the New York Milk Marketing Administration in March equalized the richest pool in its four-year history.

Counterbarrage—National agriculture, speaking through farm organizations, immediately challenged the Lewis move toward a closed shop in milk. All organized Northeast bodies except the turbulent Dairy Farmers Union—state Granges, Farm Bureaus, New York Conference members, and the Grange League Federation—joined in the formation of Free Farmers, Inc., pledging mutual protection in case of trouble and circumspectly adding insurance policies for members against possible property damage.

National bodies went on record against unionization of farmers, with Ed O'Neal of the American Farm Bureau Federation, H. E. Babcock of the National Council of Farmers' Cooperatives, and Albert Goss of the National Grange preparing to take the farmers' case to the House Judiciary Committee in Washington with limiting legislation in mind.

Other Alignments—More or less out of the fight, as a midwestern organization, the Farmers Union, most pro-labor of the farm groups, merely objected to any interference with farm co-op marketing. In New England Eastern States Farmers Exchange will organize a New England Conference Board similar to Free Farmers, Inc.

Only seasoned campaigner in labor fights is Grange League Federation, co-op whose 140,000 members last year moved feed production into hinterland feed stations to circumvent a strike at their Buffalo plant. Farmers look for U.M.W. to follow the successful pattern of the D.F.U. 1939 milk strike, in which pressure was put on handlers, forcing dairy farmers to line up with the union or lose their entrée to milk receiving stations.

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★ Union Drive in Oil

Organizers are in the field, but are going slowly, hoping for favorable decision in NLRB case to give campaign zip.

There is more than historical interest in the National Labor Relations Board's present pondering of the longest case record ever to come before it. Over 51,500 pages of testimony, 1,480 exhibits, and 33 months of hearings make up documents in a discriminatory-discharge, unfair-labor-practice complaint which grew out of a 1938 strike in four Oklahoma oil towns.

● **Attempt to Get Contract**—That strike was called by C.I.O.'s Oil Workers Union in an attempt to wring a contract from the Mid-Continent Petroleum Corp. Before the strike was over, national guardsmen were policing West Tulsa, 135 strikers were jailed (to be subsequently freed without convictions), and NLRB began sifting charges which, if held valid, would cost the company some \$2,000,000 in back pay awards.

To the petroleum producing and refining industry, with better than 250,000 wage earners in the seven states where oil is a principal business, the outcome of the case is of major concern. This is especially true because there is an oil workers' organizing campaign in progress. It is, in fact, C.I.O.'s current point of concentration ever since its last convention when this industry was singled out for special organizing attention.

● **Signal for Big Drive**—But, except for planning and groundwork-laying, the drive in oil has been hesitant and perfunctory. To provide a starting point for a higher-geared campaign, the C.I.O. is hoping for a favorable decision from NLRB in the Mid-Continent case, because that case has become well known throughout the oil country of the Southwest and is widely considered a test of C.I.O.'s ability to carry through in the face of determined opposition.

In the meantime, a staff of some 50 organizers is putting out its lines in Southwestern oil towns. This group has had some local success in Texaco, Pure Oil, Gulf, and Atlantic Refining plants. But, except for Sinclair, it has won no important company-wide contracts. Practically all union agreements in oil are on a plant basis. There have been no strikes in the industry since labor's national no-strike pledge.

● **Refining Wages Are High**—The union's basic announced objective is to secure an annual wage guarantee for oil workers. It's hard to campaign on average hourly wages because in petroleum refining these stand at \$1.109—the highest for any manufacturing in-



Edwin S. Smith, formerly a member of NLRB, now heads C.I.O.'s campaign to organize the oil industry.

dustry. The union contends, however, that with labor costs in the industry approximately 6% of total costs, as contrasted with an average of nearly 40% in all manufacturing, the oil companies can pay "adequate annual wages" without having to pass increased charges on to consumers.

The union's program also calls for elimination of company unions—most firms deal with local, nonaffiliated plant unions—and for the establishment of grievance-handling machinery.

● **E. S. Smith at Helm**—Directing the oil drive for C.I.O. is Edwin S. Smith, who was formerly a member of NLRB and who, while in office, was under constant attack for allegedly being close to the Communist Party. His C.I.O. partisanship earned him the enmity of the A.F.L., which successfully opposed his reappointment to the board.

Almost immediately after losing his government job, Smith was put in charge of the oil campaign. C.I.O. President Philip Murray, in appointing Smith, was reported to have said that his record on the labor board was such that no one could doubt he was heart and soul for building C.I.O. unions.

There seems little doubt that exploratory operations by Smith and his staff in Oklahoma, Arkansas and Texas helped steam up employers in this area so that they started the recent "grass roots campaign" for repressive labor legislation and deluged Congress with mail. Oil organizers charge that Standard Oil interests were behind it.

● **Ticklish Campaign**—In undertaking to organize oil in war time, the C.I.O. is treading on delicate ground. As a vital industry, labor peace is essential. To unionize it and avoid conflicts will take all of the resourcefulness and dexterity which C.I.O. leadership can exert.

What the Men Eat

Survey at airplane plant reveals that faulty diet habits are prevalent. Situation seen as "challenge" to nutritionists.

Late last year the National Research Council and the Los Angeles County Board of Supervisors began a survey among employees of the Lockheed Aircraft Co. at Burbank to find out whether plane plant workers are getting the right kind of food, especially whether they're getting enough of necessary vitamins (BW—Dec. 6 '41, p70). Results were awaited with considerable interest by management and by nutrition experts.

Last week "preliminary findings" were revealed by Dr. Henry Borsook, California Institute of Technology scientist and member of the National Nutrition Committee who is heading the investigation.

• **Diet Fair to Poor**—Dr. Borsook reports that about half of 1,290 employees examined so far show definite signs of one or more kinds of vitamin deficiency. The diet of defense workers, he believes, lies somewhere between fair and poor but almost no cases of acute deficiency diseases, such as scurvy, have been uncovered yet.

About 77% get a diet that is deficient in vitamin C due largely to the fact that they don't get enough orange or tomato juice. In the heart of the citrus producing area, about one out of each four workers gets no citrus fruits or juice and 54% get no tomatoes. Something like 40% get no carrots, 26% drink no milk, and 73% get too little milk. More than one out of four workers eats no leafy vegetables and 62% of them don't eat enough.

• **Rush Lunch**—Dr. Borsook finds that the plane workers eat lunch too fast. "In shifts of 25,000 men," he reports, "half an hour is given for lunch, and by the time these people find a place to eat they have only 10 minutes for the meal." Furthermore, he discovered many who said they come to work regularly without breakfast and some who simply open a can of beans for lunch.

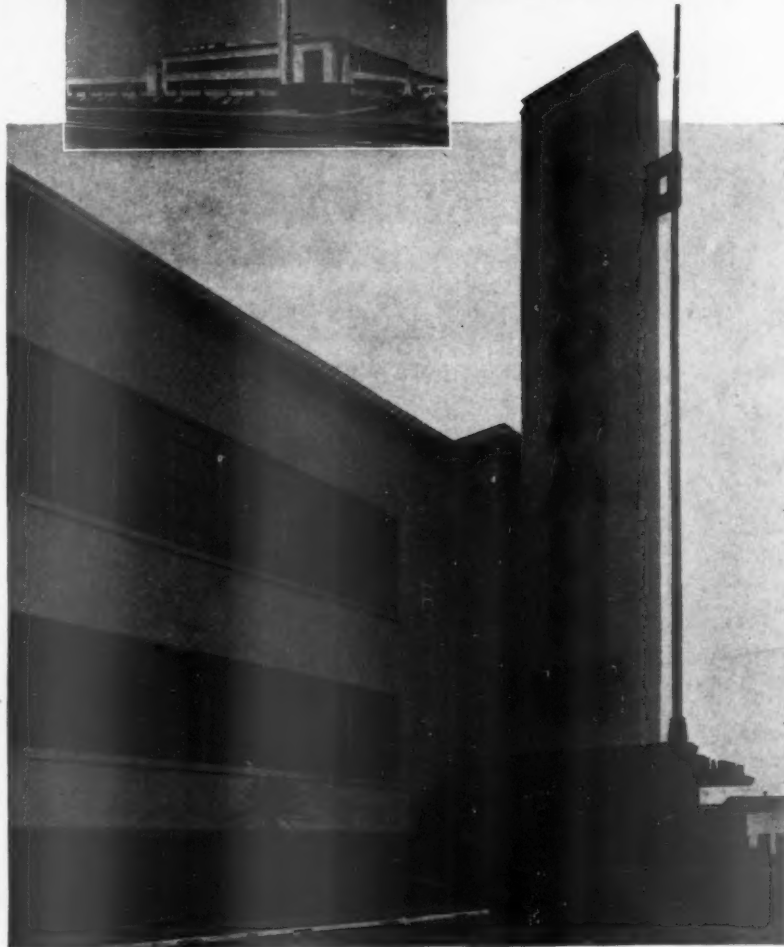
"In general, the diet of our hundreds of thousands of defense workers is so bad that it is a definite challenge to all of us in the nutrition field," Dr. Borsook concluded.

SPEEDING BADGES

"Take Your Own Photo" machines, ordinarily minor fixtures in amusement parks and shooting galleries, have been promoted to respectable jobs in a number of war plants. Factory managers,



New 7-acre plant of Ducommun Metals & Supply Co., Los Angeles. Albert C. Martin, architect; Joshua H. Marks-Charde Co., contractor.



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Concrete's service in war-time is the greater because concrete materials are readily available, with minimum

transportation; because concrete provides rigid firesafe structures with minimum critical materials.

Technical assistance on concrete problems is offered to all agencies engaged in war construction. Write for "Concrete for Industrial Buildings," free in U. S. or Canada.

PORTLAND CEMENT ASSOCIATION
Dept. 4c-12, 33 W. Grand Ave., Chicago, Ill.

A national organization to improve and extend the uses of concrete...through scientific research and engineering field work

**SUPPORT THE RED CROSS . . .
BUY DEFENSE STAMPS AND BONDS**

Labor and Management • 73



seeking an easy method of employee identification, find that the automatic machines turn out passport-size pictures for badges or passes in less than five minutes.

Employment of large numbers of new workmen and increasing precautions against sabotage have complicated the problems of employee identification. Photo machines speed up the system by providing pictures on the spot by a direct-print process which eliminates development and negatives. The machine occupies only about the space of a telephone booth and operates automatically without focusing.

Labor Landmark

Need for protection of a worker's interest against union is recognized by federal agency for first time in NWLB decision.

The need to protect a worker's interest against his union has been recognized by a federal agency for the first time. This significant departure was taken by the National War Labor Board in the Walker Turner, Co. case, in which a maintenance-of-membership contract with a retroactive date was granted to a local C.I.O. union.

• **Something Taken Away**—Thus far, the landmark character of the case has been obscured by the bitter controversy that raged over the maintenance-of-membership issue. What makes the case far-reaching in importance is that, while granting "union security" to the local, the board also took something away from the union.

The security which the union gets is written into an agreement, dated this week, which provides that employees of Walker Turner who were union members in November, 1941, must maintain their membership in good standing or be fired. NWLB acted on the theory that the union was entitled to make up ground which it had lost through employer antagonism while it adhered to a no-strike pledge. Present members must remain in good standing, and those who deserted the union after contract negotiations with the company opened last November must return.

• **Hostility Measured**—In itself, this much of the board's ruling is unprecedented. It signifies that an employer's "attitude" is weighed against a union's claims. How hostile an employer may be, and how effectively he expresses his hostility, may be the decisive factor in board reckoning of a union's need for protection.

But the far more important part of the Walker Turner decision is that which sets up certain prohibitions on the union, limiting its freedom of action and establishing what is in effect government regulation of union affairs. NWLB has clearly taken the ground that power achieved through government grant carries with it public responsibility.

• **Conditions of Grant**—Under the terms of the award, the local union involved gets its security by government fiat on condition (1) that it waive claims to dues and initiation fees which accrued prior to Apr. 1, 1942; (2) that it does not increase its dues or initiation fees by its own action (such an increase will require a mandate from the parent organization); and (3) that it shall not coerce any employee into joining (any

BAKER CRANE TRUCKS

speed up yard operations



**THE MONARCH
MACHINE TOOL CO.**
saves time and space

With every available square foot of inside floor space needed for increased production, yard storage and handling takes on added importance. Baker Crane Trucks have the sturdiness and maneuverability required for this work—their trackless flexibility makes them ideally suited for carrying heavy materials in and out of

buildings, and placing them just where needed. Time, space and man-power conserved has today a value far greater than the dollars and cents savings.

Let us demonstrate how a Baker Crane Truck may step up the efficiency of your yard storage operations. Call our nearest representative, or write us direct.

BAKER INDUSTRIAL TRUCK DIVISION of the Baker Raulang Company
2164 WEST 25th STREET • • • CLEVELAND, OHIO

Baker INDUSTRIAL TRUCKS

employee who claims to have been forced has the right to trial by an impartial umpire).

In other words, the Walker Turner decision erects safeguards for the worker against the union, and recognizes that a worker's interest and the union's interest are not always identical. Employers have long demanded that some such provision be made part of the Wagner Act, contending that rights of individual workers could be menaced by union abuses as well as by management malpractices. Handing power to a union through National Labor Relations Board procedure put no curbs on a union's use of that power beyond the general taboos of criminal and civil codes.

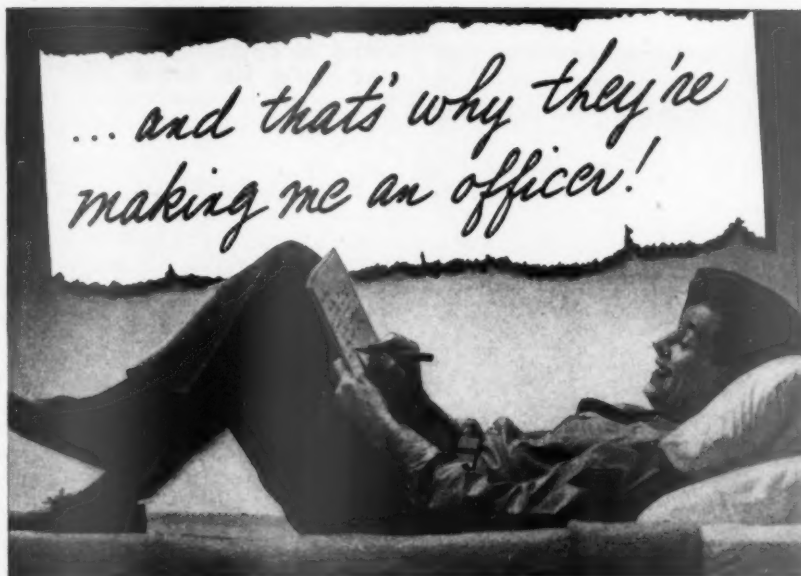
New Thinking—The Walker Turner ruling is not yet fully understood. The labor movement has been preoccupied with defending the maintenance-of-membership award against a storm of employer criticism. Similarly, employers have been slow to realize that it marks a new phase in government thinking.

When its consequences are fully appreciated, Walker Turner may become as much of a cause célèbre as the Danbury Hatters case, which, back in 1908, established that a labor conspiracy was just as actionable as any other kind.

C.I.O.'S PUBLICITY DRIVE

Normally a bulky part of union revenues goes into "war chests." The funds are used to finance strikes, an expense which any growing union expects to bear at fairly regular intervals. But with every major union in the country adhering to a no-strike pledge there is little point in salting away money to provide for contingencies that are remote if not actually improbable. Besides, union income, which is in pretty direct ratio to employment, is at record highs. C.I.O.'s United Automobile Workers, for example, paid a per-capita tax to C.I.O. headquarters last month on more than 500,000 members—and monthly dues are \$1 a head. Even war chests that have been depleted by protracted strikes or lean years from the standpoint of poor employment and consequent paucity of dues are perking up. There is, in fact, an opportunity to engage in activities that heretofore couldn't be afforded.

So unions, which have always longed to cross swords with employers in national public relations campaigns, are now jumping at the opportunity. U.A.W.'s appropriation for full page newspaper ads which appeared this week, promoting its "Victory Through Equality of Sacrifice" program, is a beginning. There will be more—from U.A.W. and from other unions. And there will be union money pouring into the 1942 election campaign on a scale hitherto unknown if present intentions of labor leaders are carried out.



DEAR GANG: Well, it seems the Army has the same problems as business. My boss—the Colonel—was always wanting to speed up. That had a familiar ring. Then I remembered how we used paper to get things done in the office. So I made suggestions here for organizing our work. Guess they liked my ideas. Anyhow, I'm headed for officers' training school. Regards, Joe.



DEAR JOE: Congratulations on your promotion! And if you think the ideas you got from our new office methods are helping you, you should see what paper and printing are doing for us. We've got some new forms that do everything but talk. So don't worry about things at this end. We'll take care of your work till you come back. Best of luck. The Gang.

TO SPEED UP YOUR OFFICE WORK, Hammermill offers two free booklets. How to get information, pass along orders and instructions, check results and responsibility. Send for these free helps now!

**21 WAYS
TO KEEP
A CLEAR
DESK**

HAMMERMILL

Papers for Office Use

BOND • DUPLICATOR • MIMED-BOND

**HOW TO
DESIGN A
BUSINESS
FORM**

Hammermill Paper Company, Erie, Pa., Dept. BW 4-18
 Please send "21 Ways to Keep a Clear Desk" and "How to Design a Business Form."
 If you use an office duplicator, check kind: ☐ stencil; ☐ gelatin; ☐ spirit.

Name _____ Position _____

----- (Please attach to your company letterhead) -----



clues:
Turning the "Searchlight" on Opportunities
"clues" will appear in the May 9th and 23rd issues next month. Copy for scheduled issues required 5 days in advance. **RATES:** 50 cents per word or \$2.50 per line (or fraction) per insertion, payable in advance. Minimum charge \$5.00. Discount 10% on orders for insertion in four consecutive issues. Publication has number addresses count as 3 words; replies forwarded without additional charge. Address box number replies c/o Business Week, 330 W. 42nd St., New York, N. Y.



PEOPLE

positions wanted

- **FINANCIAL EXECUTIVE** desires connection manufacturer war products, increase working capital. Successful sales and management experience. Age 43. Box 293.
- **GENERAL EXECUTIVE**, majoring in merchandising, but fully capable acting assistant to president or general manager. 46. Twenty years splendid record three major companies. Box 294.
- **WRITER OF TRAINING MANUALS**, technical experience, will plan, dig out essential material and prepare effective employee training including group leader instruction. Will analyze your needs; produce required material on businesslike schedule. Box 292.
- **EXECUTIVE**, broad experience in plant management and purchasing. Government Bureau experience. Graduate Eng. 47 years old. Box 291.
- **MANUFACTURING EXECUTIVE** available. Broad experience in organizing and developing production possibilities of plants. Experienced in twenty-four hour, seven day operation. Box 289.

employment service

- **THOROUGHLY ORGANIZED SERVICE** of 32 years standing and reputation, carries on preliminary negotiations for positions in the higher salary bracket. Procedure is based on an aggressive campaign individualized to each client's personal requirements. Moderate retaining fee protected by refund provisions. Identity covered and present position protected. Send only name and address for details. R. W. Bixby, Inc., 282 Delward Bldg., Buffalo, N. Y.
- **EXECUTIVES AND TECHNICAL MEN.** Contact employers through our confidential and effective methods. Established 27 years. The National Business Bureau, 20 W. Jackson, Chicago.

SERVICES

wood and metal patterns

- **OLDEST ESTABLISHED** pattern and machine works on Long Island can take on additional wood and metal pattern work. Eppenbach, Inc., 4510 Vernon Blvd., Long Island City, N. Y.

labor relations

- **LABOR RELATIONS SPECIALISTS.** Our Staff of negotiators has a 100% record of successful collective bargaining for management. Ask us also how our practical employee morale building programs increase production. Labor Relations Institute, 1775 Broadway, NYC.

production increase

- **NATIONALLY-KNOWN** firm of consultants with successful record offers method for increasing production adaptable and effective in most plants without adding equipment. Details on request. No obligation. Methods Engineering Council, Wood and Franklin Streets, Station 21, Pittsburgh, Penn.

rental—home finding

- **TRANSFERRED EXECUTIVES GUILD**—150 correspondents in strategic cities to solve your home left behind or rental home-finding problem through our Interstate Realty Clearing House and Home-Finding Bureau. Sales, rentals, exchanges. Home Office, 1171 Washington St., Newton P. O., Boston, Mass.

NEXT ISSUE for "clues" ads May 9.
Copy required May 5.

FINANCE

Dividend Reversal

Though slide-off is gentle now, it probably will become more marked as result of higher taxes or other profit curbs.

That long-feared reversal of the upward trend in corporate dividends now seems definitely to have arrived. The slide-off at present is gentle; it probably will become more pronounced later in the year when the full impact of taxes can be estimated. In any event, there won't be any new high since 1936 for "Christmas payments," as there was last December (BW—Dec. 6 '41, p100).

• **Reason Is Clear**—Reason for the paradoxically tighter grip on purse strings in the face of mounting sales and revenues is clear to everyone. Taxes to be paid next March will be at record high levels, or, if they're not, it will mean that profits have been arbitrarily curbed. If enacted into law, the proposed measures to limit corporate profits would simultaneously put more or less of a ceiling on tax collections. Chances are, however, that the stiffest restrictions of profits will be on the tax end. Either way, companies will have less cash for dividends.

Possibility of a dividend reduction hung darkly over Wednesday's annual stockholders' meeting of the American Telephone & Telegraph Co. For more than 40 years, despite depressions and panics, the company has refused to lower its dividend. It was able, by dipping deeply into surplus, to maintain the \$9 annual rate throughout the depression. An official of the company testified in Washington last week, how-

ever, that if the Treasury's tax proposals were enacted the company's annual earnings might be reduced \$4 a share and a dividend cut might result.

The company's quarterly report this week showed that it still is covering dividends by a fair margin—but that's on the basis of the federal income taxes computed under the terms of the law as it now stands.

• **Stockholders Warned**—At the recent annual meeting of the General Foods Corp., Colby M. Chester, chairman, warned that it might be necessary to reduce the common dividend at this week's meeting of directors despite a new high record in sales volume and profits before taxes. The enlarged scope of the corporation's operations last year drained cash, which must be conserved to meet the day-to-day needs of the business; the company last month went to the banks for \$3,750,000, and this week borrowed another \$3,000,000.

The R. J. Reynolds Tobacco Co. has just reduced its quarterly dividend from 50¢ a share to 35¢, and Diamond Shoe this week lowered its rate from 30¢ a share to 20¢ a share each three months.

• **Dividend Trend**—According to the New York Journal of Commerce, dividend payments in the first three months of 1942 totaled \$748,784,000. The following table shows total dividend payments each quarter for the past four years in millions of dollars:

Quarter	1938	1939	1940	1941	1942
First	\$715	\$657	\$735	\$780	\$749
Second	631	652	793	858	...
Third	624	700	824	881	...
Fourth	837	1,140	1,206	1,334	...

Exception to the present trend toward lowered dividends are second- and third-rate preferred stocks on which arrears have accumulated.

MONTHLY INDEX OF BUSINESS ACTIVITY



Business Week's Monthly Index of Business Activity rose to 176.3 in March—3.7 points ahead of February's 172.6, and 21.1 points, or 11.6%,

above last March. For the first quarter of the year, the Index averaged 171.7, up 16% from the 147.6 recorded in the first quarter of 1941.

Producers' Loans

War Department program uses government guarantee to extend credit in cases which banks otherwise can't handle.

Swiftly taking advantage of its new power to guarantee loans to arms manufacturers, the War Department has launched a large-scale program of financial assistance for contractors and sub-contractors. Any producer of essential war materials who finds that commercial banks are reluctant to finance him can now ask the government to endorse his loan.

• **Production vs. Risk**—Ability of the company to produce, as well as its credit rating, will determine the response an applicant gets. Bankers expect that heretofore dubious credit risks will get money under the new program, but they don't know yet just how far the government will go in rating production over financial record.

The twelve Federal Reserve banks and their branches will act as fiscal agents of the government, approving loans and handling the details of underwriting. This arrangement implements last month's executive order empowering the War and Navy Departments and the Maritime Commission to make or guarantee loans to arms producers (BW—Apr. 4 '42, p7). Federal Reserve banks will also represent the Navy and the Maritime Commission, but the War Department expects to make most of the guarantees under the new authority, since it deals more with small contractors.

• **How Plan Will Work**—Whenever possible, private banks are encouraged to make loans on their own account. Government guarantee is reserved for cases the commercial banks won't handle.

Under the new plan, the manufacturer who wants assistance applies first to his own bank. If the bank considers his proposition too risky, it asks the Federal Reserve Bank of the district for a government guarantee. Attached to each Reserve Bank is a liaison officer from the War Department who certifies the applicants qualified to produce essential war materials. Investigations of credit standing and final decision on the amount to be loaned are left in the hands of the Reserve Bank, but the War Department sets the maximum amount that may be loaned.

• **Liability Is Treasury's**—In making the guarantee, the Reserve Bank assumes no liability itself. It acts simply as a fiscal agent of the government and the contingent liability falls on the Treasury. Reserve Banks are empowered to make loans to arms contractors under excep-

STURDY BRONZES *for* ORDNANCE come from **AMPCO**



Before 40 m. anti-aircraft gun has parts made of Ampco Metal.

BRONZE SUB-CONTRACTOR TO THE WAR INDUSTRIES

In anti-aircraft gun carriages — in varied types of ordnance — Ampco Metal, an alloy of the aluminum bronze class, and Ampco-made bronzes are used because of their excellent bearing characteristics and ability to withstand high stresses.

The Ampco foundries are furnishing bronze parts for aircraft, ordnance, machine tools and other essential war industries.

Where parts are needed that must "take it" — give unusual service under severe operating conditions, Ampco bronzes can be selected with assurance that they will give several times the life of ordinary materials.

BRONZES TO GOVERNMENT SPECIFICATION

Government contractors, needing a reliable source of bronzes, are invited to submit their requirements to our engineers. Bronze specifications to government requirement are readily met at Ampco.

Literature covering applications and uses of Ampco Metal are listed at left. Sent free on request.

AMPCO METAL, INC.
Department BW-4 Milwaukee, Wisconsin

AMPCO LITERATURE Available

- AMPCO METAL, Catalogue 22
- Ampco-Trade Coated Aluminum Bronze
- Ampco-Welding Rod
- Ampco Metal in Bushings and Bearings
- Ampco Metal in Acid-Resistant Service
- Ampco Metal Centrifugal Castings
- Ampco Metal in Machine Tools
- Ampco Metal in Dies
- Ampco Metal in Aircraft
- Ampco Metal in Heavy Machinery
- Ampco Metal in Gears

AMPCO METAL

The Metal Without An Equal





ELECTRIC GATE OPERATOR FOR A DEFENSE PLANT...

THROUGH this entrance pass men, trucks, and railroad cars. The main gate, hung by a special frame from a high overhead track, is controlled from inside the gate house, with the electric operator in its weather-proof housing located alongside the fence.

PROTECTION • TIME-SAVER

The guard can thus handle the gate accurately and efficiently by simple push-button control. For further details on many other defense plant uses of Barcol Door and Gate Operators, consult your Barcol representative.

BARBER-COLMAN COMPANY
ROCKFORD - ILLINOIS



"\$97000 in Sales! Cost \$400"

—writes Cabots, Inc., 2709 Milwaukee Ave., Chicago
FREE book tells new way to get more customers, make more money. It's the CARDMASTER SYSTEM of SELLING, using penny postcards. Thousands in use. Low in cost. Retailers, jobbers, factories, laundries, insurance... ANY business. The book is a mine of modern selling ideas. Write:

CARDMASTER CO., 4548 Ravenswood, Dept. 44, Chicago

The INDEX TAB, with gummed behind,
Makes filed reports a cinch to find.
The price is modest as can be,
So naturally you'll agree
That only a determined dope
Would make his secretary grope.

USE
Dennison
INDEX TABS

One of the Dennison Handy Helpers:
Shipping Tags, Index Tabs, Trans-
parent Mending Tape, Mailing La-
bels, Gummed Labels, Gummed Stamps.

DENNINGSON MFG. CO., DEPT. D-80, FRAMINGHAM, MASS.

THE MARKETS

Price averages of industrial securities this week sank to the lowest since early 1935 in comparatively heavy volume. Utility shares dipped to a new all-time low, but railroad shares, although declining, remained above their 1940 fall-of-France lows. On Tuesday, 222 stocks listed on the New York Stock Exchange recorded new 1942 low prices.

• **Sellers on All Sides**—Announcement from France that Nazi-sympathizer Pierre Laval had been elevated to a key government position touched off the selling in a market which already seemed distinctly queasy. Investment selling, as well as open-account liquidation and some short selling, appeared in the scramble to unload securities. All groups declined, and few individual issues escaped the selling.

Decca Records showed its sharpest dip just before publication of the announcement that use of shellac, basic ingredient in phonograph records, must be curtailed by 70%. The War Production Board's order does not necessarily mean, however, that production of disks will be cut to 30% of 1941 output because the company may resort to substitutes for shellac (most of which comes from India) or to recovery of the raw material from worn-out platters.

• **Exceptions to Trend**—A few special stocks moved against the drift in prices. The common shares of the New York & Harlem Railroad, for instance, sold on Monday for \$87.50 a share and rose on Tuesday, day the price averages broke through to new lows, to \$93 a share, a gain of \$5.50. This road owns the very valuable property which gives the New York Central Railroad and the New York, New Haven & Hartford entrance into New York City. New York Central

owns two-thirds of the outstanding N. Y. & H. stock, which pays \$5 annually in dividends. There has been talk recently of a consolidation between the parent and the leased property.

• **Almost Back to 1935**—Industrial price averages now are about 9% below their post-Pearl Harbor lows of last December and about 14% below their fall-of-France bottom. They remain, however, slightly more than 1% above the low of 1935. This point seven years ago was about one-third of the way up in the bull market which lasted from 1932 until the commodity break on word from Washington in 1937 that prices were too high.

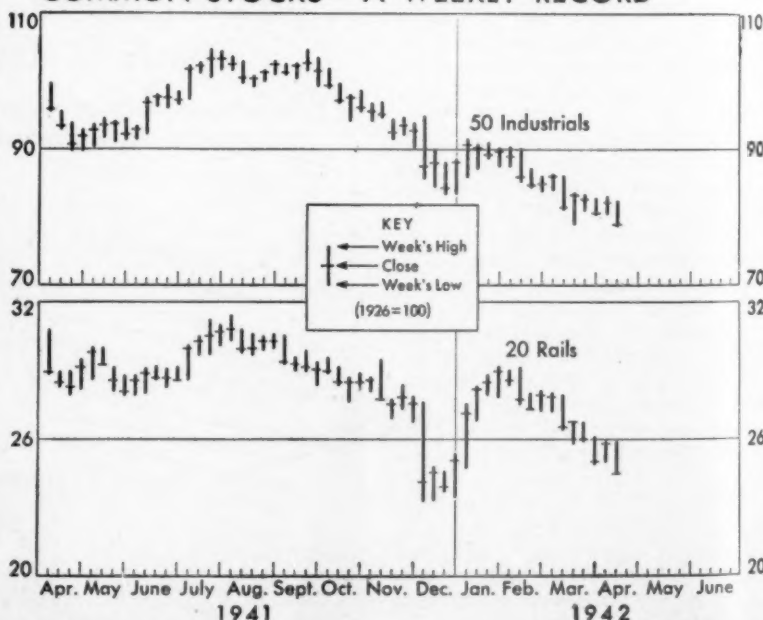
So far as chart readers are concerned, the break-through of industrial averages means little. Last year, last month, and last week we were in a bear market and we are still in it. Although primarily in a downtrend, short-term rallies are expected. And unless railroad averages, now about 25% above their 1938 lows, penetrate these resistance points, there is always ground for hope that the turning point between a bear market and a bull market may be near at hand.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ..	78.9	82.4	83.4	93.5
Railroad ...	24.5	25.8	26.7	28.5
Utility	29.0	29.8	30.8	47.5
Bonds				
Industrial ..	107.2	106.4	105.7	102.8
Railroad ...	87.7	89.4	88.7	88.6
Utility	102.5	102.5	100.7	105.9
U. S. Govt. .	110.8	110.7	110.2	110.2

Data: Standard & Poor's Corp. except for government bonds which are from the Federal Reserve Bank of New York.

COMMON STOCKS — A WEEKLY RECORD



Data: Standard & Poor's Corp.

© BUSINESS WEEK

tional circumstances, but these come under a different classification.

Although peacetime credit standards will not be applied, the banks will take account of all factors ordinarily considered in determining eligibility. Requirements will be less rigid, but the method of rating will be the same.

• **Direct Underwriting?**—Designation of the Reserve Banks as fiscal agents apparently rules out direct underwriting by the War Department, although this power was delegated to it by executive order. The department also has authority to make loans direct to manufacturers, but in the past it has confined itself to 30% advances on certain contracts.

Now that the new system is in effect, bankers expect that loans made by commercial banks and guaranteed by the War Department will be used as much as possible instead of direct loans by government agencies.

• **Interest**—Interest rates and maturities will be adjusted to individual cases. Although no interest rates have been announced, the money market predicts that a 5% basic rate will be tried at the start.

OVERDRAW PLEASANTLY

Convenient credit for small depositors is offered by the Merchandise National Bank of Chicago. A depositor, after establishing credit responsibility and agreeing to repay any loans made with the deposit of his next pay check, may write a check at any time for up to \$25 in excess of the amount on deposit—thus making an automatic loan of the amount over his deposit. A service fee of \$1 is charged for each such loan regardless of the period it is outstanding.

CITY BUYS CAR LINES

On Apr. 24 cash proceeds from \$17,500,000 of municipal street railway bonds are to be delivered to Mayor Frank J. Lausche in Cleveland's City Hall, and the city will buy its metropolitan transportation system, thus ending a four-year fight over public ownership. Operation is to be directed by Walter J. McCarter, red-headed, aggressive vice-president of the Cleveland Railway Co.

The revenue bonds were purchased by a syndicate headed by Otis & Co.

TELEGRAPH MERGER?

After years of discussion, legislation finally has been introduced in the Senate which would permit voluntary consolidation of domestic telegraph companies and separate mergers of international concerns. Whether Western Union and Postal take the hint will depend on terms of the legislation and success of inter-company negotiations.



Down to the sea in ships

Fluid Drives

for Industrial,
Marine and
Automotive Use

A long history of successful operation is behind the present trend to Fluid Drive for marine Diesel applications. American Blower Fluid Drive is playing a vital role, too, in trucks, locomotives, bridges, oil drill rigs, power plants, excavators, conveyors, etc. Alert, resourceful American industry is, in fact, utilizing Fluid Drive in new and improved products, in ways never dreamed of but a few years ago. Have you investigated Fluid Drive?

AMERICAN BLOWER
HYDRAULIC COUPLING DIVISION
DETROIT, MICHIGAN

Division of AMERICAN Radiator and "Standard" Sanitary Corporation

REPORT on a new book

Money, Currency and Banking

By HAROLD L. REED

Robert Julius Thorne, Professor of Economics
Cornell University

522 pages, 6 x 9, \$3.75

An introduction to the study of money and currency that will meet the reading requirements of the banker and business man who has some interest in the subject other than that of his own enterprise.

The book grew out of complaints that many works indicate excessive zeal to present the subject categorically and factually—to build on the foundations of Horace White and provide little encyclopedias of financial institutions. The emphasis of this book is to prepare for a better understanding of recent and revolutionary developments both in monetary policies and in theoretical interpretation. To accomplish this basic purpose, the significance of important events in our financial history are reexamined and reappraised. The distinction between "money" and "currency" is consistently maintained.

McGraw-Hill Book Co., Inc.,
330 W. 42nd St., N. Y. C.

Send me Reed—Money, Currency and Banking for 10 days' examination on approval. In 10 days I will send \$3.75, plus few cents postage, or return book postpaid. (Postage paid on cash orders.)

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To examine a copy of this new book for 10 days on approval, fill in and mail the coupon.

COMMODITIES

No Bags to Fill

That is prospect faced by California growers as result of burlap restrictions. Frantic search made for a way out.

California grain growers are out on a limb because of the shortage of Hessian cloth burlap bags and the government's recent order freezing burlap (conservation order M-47). The Golden State is the only one where the bulk of the grain harvest still is sacked instead of being handled in bulk.

• **Tackling the Problem**—The agricultural department of the California State Chamber of Commerce is trying to figure out ways and means of solving what is fast becoming a very acute problem. This year's California grain crop will run about 1,845,000 tons and it must be stuffed into about one third the normal number of bags. Between 30,000,000 and 40,000,000 sacks are ordinarily used. If anybody has any ideas, the Californians would like to get them.

Although the railroads offer the same tariff for whole grain in bulk or bags, nearly all shipping facilities are based on the sack-shipment custom. Most California farmers have no way of handling bulk grain from the thresher spout to the railhead, and except for a few small elevators, warehouses at tide-water are equipped for sack storage only.

• **Approaching Harvests**—Starting this month, a 11,000,000-bu. wheat crop will be harvested, followed by 25,000,000 bu. of barley. Shippers must find a way of handling these harvests. Sacks will be needed, too, for the rice, corn, and

oats crops, the potato harvest (starting this month), and for onions, dried beans, almonds and walnuts. And all this is on top of the demands of California's expanding beet-sugar industry.

Bag manufacturers on the West Coast are carrying less than 25% of normal stocks. Under the conservation restrictions, two-thirds of new burlap imports will be set aside for government use (BW—Jan. 3'42, p39).

• **Revolving Supply**—Slight relief may come in greater use of the revolving supply of empties. California feed dealers already are refusing to sell sacked grain except on the bag exchange basis.

Hope is also seen in the substitution of other materials, particularly in the government's proposal to buy 200,000,000 yd. of cotton cloth if a sufficiently strong fabric for heavy bagging can be devised. Already some California manufacturers have been selling 50-lb. light cotton bags in place of the 100-lb. burlap sack. Relief from this source is limited by the capacity of cotton mills and the government's corner on heavy duck. Also under consideration are plans for using domestic fiber, particularly jute, which was formerly grown in the Sacramento delta region, and hemp, but again lack of mill facilities is a bottleneck.

• **Bulk Methods?**—Caught with their collective trousers down, California farmers are asking why they alone are sack-handling their grain. Attempts have been made in the last few years to switch to bulk methods but most of the elevators proposed were never built.

Under emotional stress, some growers flatly charge that resistance to bulk methods has come from farm interests acting as stooges for the bag manufac-

turers. The sack-makers point out that barley, principal California grain crop, is not of such uniform quality that it can be advantageously bulk-piled like wheat.

• **Miniature Elevators**—Undoubtedly a considerable switch will be made this year to bulk handling. Several years ago Columbia Steel Co. sought a solution in steel bins equipped as miniature elevators. With steel no longer available, the lumber interests have taken over the work with a proposal for small knock-down storage cribs which can be assembled in the field or at the railroad. The University of California Agricultural College likewise sees hope in the construction of small bins.

The bag manufacturers argue that the cost of installing storage bins and handling equipment promises bankruptcy to many farmers.

• **Largely Up to Consignee**—In the final analysis, the whole question seems to depend more upon the consignee's ability to receive bulk storage than on the farmers' shipping facilities. Outside of the large flour mills and the California Poultry Producers Assn. at Petaluma, few local buyers are equipped for bulk storage. Even in the case of the poultry group the custom is to sack bulk shipments at the elevator for resale to the association's members.

Present heavy barley shipments to Britain are essentially a sack movement, but equally heavy consignments to mid-west breweries can well go in bulk.

Let 'Em Eat Beef

Higher lend-lease demand for lard and pork runs up price of hogs to point where smaller packers fear freeze-out.

Pressure from lend-lease customers for more lard and pig meat last week threw another loop into the knot between free live-hog prices and fixed pork-cut ceilings. For the next three to six months the Agricultural Marketing Administration will be pleased to have packers operating under federal inspection offer for sale to Federal Surplus Commodities Corporation at least 40% of their pork cuts and canned pork production and at least two-thirds of their lard and hog casings.

• **Peak for AMA Buying**—Since federally inspected packers handle about two-thirds of all pork production, AMA purchases will run to big percentages of total available pork in the middle of the spring hog slaughter run—much higher than heretofore.

Announcement of the buying acceleration came just when smaller packers, without federal inspection, were in Washington roaring that ceilings on al-

This announcement appears as a matter of record only, and is under no circumstances to be construed as an attempt to sell or an offering of these shares for sale, or as an offer to buy, or a solicitation of an offer to buy any of such shares. The offering is only made by the offering prospectus.

166,667 SHARES

AMPCO METAL, INC.

(A Wisconsin Corporation)

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Detroit, Michigan

April 9, 1942

most all pork cuts—in the face of rising hog prices—were ruining them. They faced big-plant competitors in the live hog markets who were permitted to sell lend-lease pork to AMA 2¢ above OPA ceilings, who had money to lay by a little pork for a possibly attractive future, and who, generally, had a big-volume edge in holding processing costs down.

• **Threat to Small Packers**—OPA unsympathetically pointed out that perhaps 13% of the pork-packing industry would have to go out of the pork business, which sounded pleasant to OPA since it would reduce competitive bidding in the live-hog market, nurture big packers who were supplying lend-lease pork, and tend to slough off packers with highest processing margins. Soothing words were added for consumers: total meat and poultry supplies were on the increase, about leveling off pork losses occurring, so let 'em eat beef, lamb, chickens, turkeys. The live-hog market, unkindly, knifed small packers by making another new top.

U.S. Rope Trick

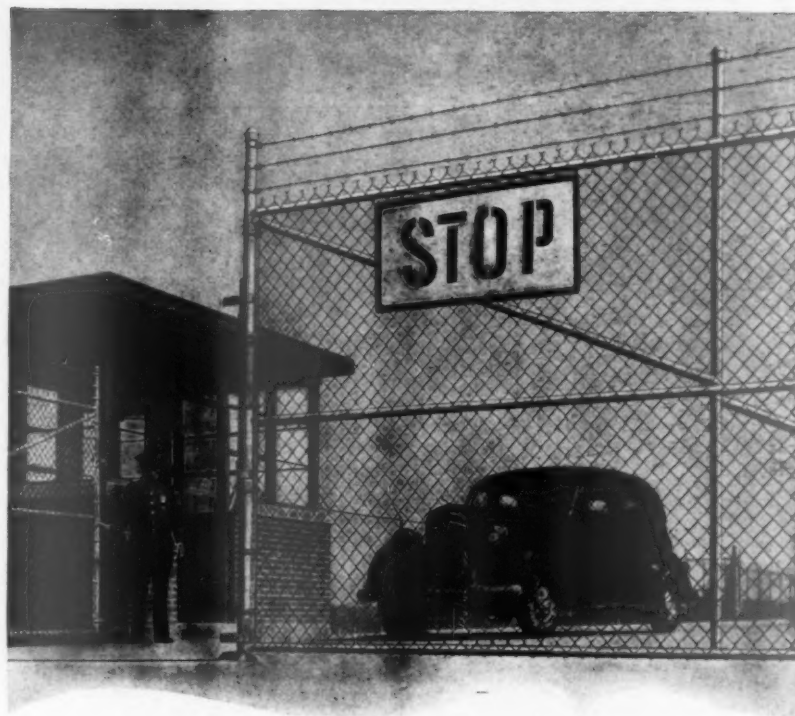
Philippines have been almost sole source of Manila fiber, but now United Fruit will expand its plantings in Panama.

Promised production of Manila fiber—choicest fiber for making marine hawsers and ropes—in this hemisphere moved a step closer to realization this week when stockholders of the United Fruit Co. were told that the company was going ahead with plans to increase its plantings to about 20,000 acres. Admitted drawback is that it will require two to three years to get production in any volume.

• **Experiment Successful**—United Fruit has been experimenting with abaca (*Musa textilis*), the plant which yields Manila fiber, on about 2,000 acres of land in Panama for several years. Recently this experimental tract has yielded moderate amounts of the fiber of satisfactory commercial quality—but not at commercial prices.

At the moment, however, price isn't a major consideration. Tremendous expansion of the United States Navy as well as this country's merchant marine will create an almost insatiable demand for ropes, lines, etc. And the Philippine Islands (which have supplied 95% of the world's needs, almost 100% of United States imports) obviously are no longer able to provide this country's needs.

• **The Labor Factor**—Dependence of the Western Hemisphere on the Far East's fibers results from the abundance of cheap and adept labor in the Orient.



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Climate, too, aided the Philippines in maintaining a dominant position as concerns abaca which holds a leading place, along with sisal and henequen, among the world's hard fibers. (Hard fibers are those derived from the leaves of plants, soft are from the stems as in the case of hemp, jute, and flax.)

Sisal and henequen, both native to the Western Hemisphere, are still available in substantial quantities. Main sources are Yucatan, where they originated, and Cuba. Yet neither fiber is an altogether satisfactory substitute for abaca in all applications because of the latter's superiority in strength, lightness, and resistance to sea water.

● **Plantings in Central America**—United Fruit's abaca venture, according to the announced plans, will involve not only expansion of plantings on its properties in Panama but also large-scale cultivation in Costa Rica on banana land which was abandoned because of fruit disease.

PEANUT PLANTING RISES

Next figures on peanut acreage will show about one million acres more than the Department of Agriculture suggested in the planting intentions report of Mar. 1. Distribution of seed stock after that date by Commodities Credit Corp. followed freezing of part of southeastern stocks and all of southwestern stocks in February, and pushes total acreage within sight of the five million acre goal.

Cost of the maneuver was the near-choking of the edible-peanut market, but since peanuts can provide more new oil for 1942-43 vegetable oil needs than soybeans and flax together, and oil is needed much more than peanut butter and candy bars, it was considered worth the disturbance.

HOME-GROWN LUFFA

Among the odds and ends of the week's war business news is an order by the War Production Board restricting deliveries of Luffa sponges to orders with an A-1-a rating. Luffa sponges are the fibrous skeletons of the fruit of a squash-like plant. Unique for their property of oil absorption the sponges are extensively used in oil filtration by the Navy. They have been commonly used as household cleaners and scrubbers and for inner soles in footwear. The supply is short because the Luffa plant has been grown commercially only in Japan.

The Department of Agriculture now is bestirring itself to get cultivation started in this country—quickly, so that a crop can be made this year. The seeds are precious but, fortunately, the planting of a few hundred acres will supply all the sponges needed. The plants will grow wherever muskmelons flourish.

THE TRADING POST

Profits Purge

Ever since the defense effort went into high gear there has been much talk about profiteering on war business. Indeed, since World War I we have had consistent agitation "to take the profits out of war."

Some of this was stirred up by sincere, high-minded people who believed that wars are started by "profit-greedy industrialists"—the "war-mongers" of pre-Hitler liberalism. It was helped along by decent people to whom the idea of making money out of war always will be repugnant. Some of it originated with extremists who just naturally have no use for profits anywhere or at any time, and who find in the emotional ferment of war an effective adjunct to their smear technique. Then, too, much of it has been kept alive by politicians, adept at making whoopee out of an issue such as war profits in order to cover up their own zeal for the special interests of those groups, blocs or what-have-you whose votes they need. The "war profits" issue is very mixed.

Unhappily it is true that there always has been a certain amount of time-and-a-halfing and double-timing in the matter of profits under war conditions. Certain wise guys, to whom every emergency is a "racket," always will sit up nights figuring out how to cash in on a war. Human nature is like that.

Congress now has before it the latest effort to "take the profits out of war." It may be more effective than earlier tries. We shall see.

* * *

The purpose of this comment, however, is merely to note in passing that some companies have taken the war-profits bull by the horns and moved to divest themselves of such excessive, or more accurately, abnormal profits as may result from war conditions.

Their action is significant not merely on its own account or because of the money involved, but also because of what it implies. It suggests that wise management sees abnormal profits at this time as bad business. It makes no difference how honestly they may have been earned, what exceptional values may have been rendered, or how wisely the company may plan to use its profits for constructive and beneficent ends. It is to be expected that the critics of business, both honest and dishonest, sincere and ignorant, will howl down any explanations, however reasonable. It's just not smart to get caught today with too much profit—however legitimate the reason.

But for all that, it would seem to be

fair to take as much notice of the companies that are patriotic enough, or ethical enough—or just plain smart enough, if you prefer—to purge their "excess-profits" as we do of those adventurous souls who still are trying to get away with them.

* * *

One such case, for example, is that of the Wayne Pump Co. which announces that, for its current fiscal year, any net profits after taxes in excess of its annual average net profits for the 5-year period 1937 to 1941 inclusive, will be paid to the government as a refund against payments received by the company for war work.

That action, incidentally, is something more than a gesture. A quick check of available figures, indicates that the Wayne Pump Co. should have, under the present income tax law, an excess profits tax exemption of about \$1,250,000. On all profit above that figure, it would pay a tax up to 60%.

But, according to its announcement, Wayne plans to refund to the government 100% of all profits in excess of its 5-year average. That average, according to my figures, is \$1,112,563. So the company proposes, in effect, to pay 100% over the \$1,112,563, whereas the present law asks of it only up to 60% over \$1,250,000. Even assuming that the new law might increase the rate from 60% to 75%, the lawful tax still would be less than the voluntary refund.

Another case involves North American Aviation, Inc. which has returned to the government some \$14,000,000 realized through unexpected manufacturing efficiencies, instead of retaining it as profit. President Kindelberger of that company reports that its manufacturing efficiency "has reduced the cost of a plane 33% over the cost of that same plane in the summer of 1940, when the costs of both labor and materials were lower."

Still another type of case is that of Continental Motors, Inc. which has agreed to a \$40,000,000 reduction in the price of its ordnance and aircraft contracts, resulting from increased efficiency, plant economies, improvement in methods, and "the whole-hearted co-operation of its employees."

These are but a few isolated cases. I suspect that many other companies who have found themselves clearing more than they had figured on war business are working out programs to avoid the appearance of profiteering at the nation's expense. And such cases, it seems to me, deserve as much attention as is accorded to those in which spirit and practice follow the orthodox patterns. W.C.

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RADIO — SOUND — COMMUNICATIONS

THE TREND

WANTED: A "HOT MONEY" COOLER

When Secretary of the Treasury Morgenthau offered his \$7,600,000,000 tax plan to Congress a month and a half ago (BW—Mar.7'42,p13), the whittlers immediately got busy. Senators and representatives alike declared the levies were too high, that \$6,000,000,000 was just about all the nation's taxpayers could stand. But the whittlers—and the Treasury, too—may have to revise their estimates. The word has gone out from the White House that President Roosevelt is at work on an overall price-, wage-, and profits-control program, very much along the lines of the Baruch plan (BW—Apr.11'42,p88). To implement it—to make it work—Mr. Roosevelt has suggested higher taxes. And Treasury statisticians and actuaries have been working overtime these last few nights trying to figure out where another \$5,000,000,000 or so might come from.

• Now Mr. Roosevelt is not out for increased revenues for revenues' sake. The President—and he's been prodded by Price Administrator Henderson—wants to sop up excess purchasing power, variously estimated at between \$5,000,000,000 and \$15,000,000,000. This excess, which OPA economists call the "inflation gap," is the "hot money" of our war economy, because, as Business Week noted two months ago, it "burns holes in consumers' pockets" (BW—Feb.21'42,p76). It is the pressure of this "hot money" on the country's diminishing supply of civilian goods that causes prices to rise; and even if you have price ceilings, it would threaten to work its way over to "black markets."

To siphon off this "hot money" by taxation presents a very special problem. Heretofore, our federal tax structure has been based upon a commonly accepted standard: capacity to pay. But a graduated individual income tax, which takes increasing sums away from persons in the higher-income brackets, will not turn the trick at all. High taxes on persons in the upper brackets will reduce their buying only slightly; the major effect will be to curtail their savings. They'll spend pretty much as before to preserve their standards of living.

• Nor will higher corporation taxes prove effective. It's true that a boost in rates would bring in higher revenues, but those revenues would not cut down the supply of "hot money." Remember, corporations do not consume food, clothing, or shelter as do individuals. When a business wants to spend its profits or its depreciation reserves, it buys specific things: new plant; new machinery; more inventories. But in an economy controlled by the War Production Board, corporations cannot readily pursue those peacetime policies—not unless the purchases are in the interest of the war effort; and then, of course, the expenditure would be on war goods and would not constitute "hot money" competing in the civilian market.

Corporations could boost "hot money" in circulation

by increasing their dividends, but so far the trend has been the other way (page 76). And even if dividends did rise, a good portion would be drained off the civilian-goods market by income taxes. Thus corporation profits are not a significant "hot money" problem.

• Obviously, then, the economics of the problem call for a new taxation philosophy. Congress must go after the increased purchasing power; it must try to siphon off income from the persons who are buying more food, clothing, and house furnishings than formerly. That means that Congress must go after persons in the lower-income brackets. For that is where the "hot money," the war-born increase in purchasing power, is (BW—Mar.14'42,p96). And that implies a terrific wrench for many legislators and economic liberals—switching from a capacity-to-pay to an increased-capacity-to-buy concept of taxation.

Yet, by no means is it safe to assume that taxes will cut down the supply of "hot money." Right now, persons in all walks of life are buying savings bonds and stamps; workers, particularly, are investing some share of their increased earnings in war savings. And a boost in taxes might easily cause them to cut down these purchases. The net result would be taking money out of one of Mr. Morgenthau's pockets and putting it into another; yet there would be no real reduction in the pressure upon the consumer-goods market.

• Therefore, taxation is, at best, a siphon with a leak in it. And Congress, if it really intends to control prices and cut down consumer purchasing power, must close that leak. A tax program must be supplemented with a forced-savings plan, along the lines adopted in Great Britain. There, tax rates are split into two parts: one part goes to the government for keeps and the other part goes to the government as a loan "for the duration." In that way, people are not only forced to pay taxes, but also are forced to save in accordance with their capacity to do so. The over-all effect is compulsory, or rationed, abstinence.

Moreover, a combination tax-savings program has political as well as economic point. Suppose, instead of collecting \$5,000,000,000 in additional taxes, Congress chose to collect a lot less in taxes and a lot more in forced savings, so that the total take would far exceed taxes plus probable voluntary savings. Such a proposal might be more palatable to farmers and workers than an out-and-out tax boost. Though they'd pay more cash into the Treasury, they'd get something back later. And it would be a lot better for the country. For it would really get at the "hot money" problem by enforcing abstinence. And, that, in the last analysis, is what the President is after.

The Editors of Business Week

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